March, 1922

Engineering Library

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McGraw-Hill Company, Inc.



"Two Million People to Visit 200 More Homes Electric in 1922"

And every visitor a better prospect for adequate wiring and more appliances

Plan Now for a Home Electric Campaign in Your Town This Spring



Women buy the lamps for the home

And so to the women of a million homes will be carried, by the April issue of the Ladies' Home Journal, the story of Edison MAZDA Lamps—

Lamps that make the home more cheerful and comfortable; that lighten the household tasks; that make childhood happier and encourage confi-

> dences between parents and children; that mean a saving in the family budget.

> The advertisement shown above — the first of a series

of four full pages, in four colors, in the Ladies' Home Journal — will be read by women of your city. And we are furnishing Edison MAZDA Lamp Agents with a poster reproducing the illustration in the original colors, so that all who pass their windows may know that better and more economical home lighting may be purchased inside.

Advertising Edison MAZDA Lamps is only part of our service to our Agents; helping them to bring customers into their stores and to sell them the right lamps is included in that service. Are you taking advantage of it?



With which is incorporated Electrocraft

March, 1922

"Happiness in Every Room"

With Electric Service in the House

DERHAPS, after all, what is needed now to get the idea of an all-electrical home over to the public is a single word. a phrase, the mere saying of which will conjure up a picture of the pure pleasure and happiness that electric service means.

"Happiness in Every Room" is such a phrase. A candy has been made famous by the slogan, "Happiness in Every Box," because one was tempted to buy, not by the material contents of the box, but because of the vision conjured up by these four words of the happiness to be given with the candy. Too often the phrase, "an electrified kitchen," or even "Home Electrical," conveys nothing more to the uninitiated than a confused impression of motor-driven machinery and complicated wiring processes. Too seldom are they linked mentally with the happiness which is the sole end and reason-for-being of electric service.

In a day when the woman of the house is beginning to pity herself as the only and original "solitary manual laborer," convenience outlets and electrical devices are excellent aids in making solitary labor at least bearable. "Happiness in Every Room" is a slogan, then, with a very real appeal to the housewife. For that is actually what electric service is, and that is what it should mean to her.

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"HAPPINESS IN EVERY ROOM"

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ELECTRICAL MERCHANDISING

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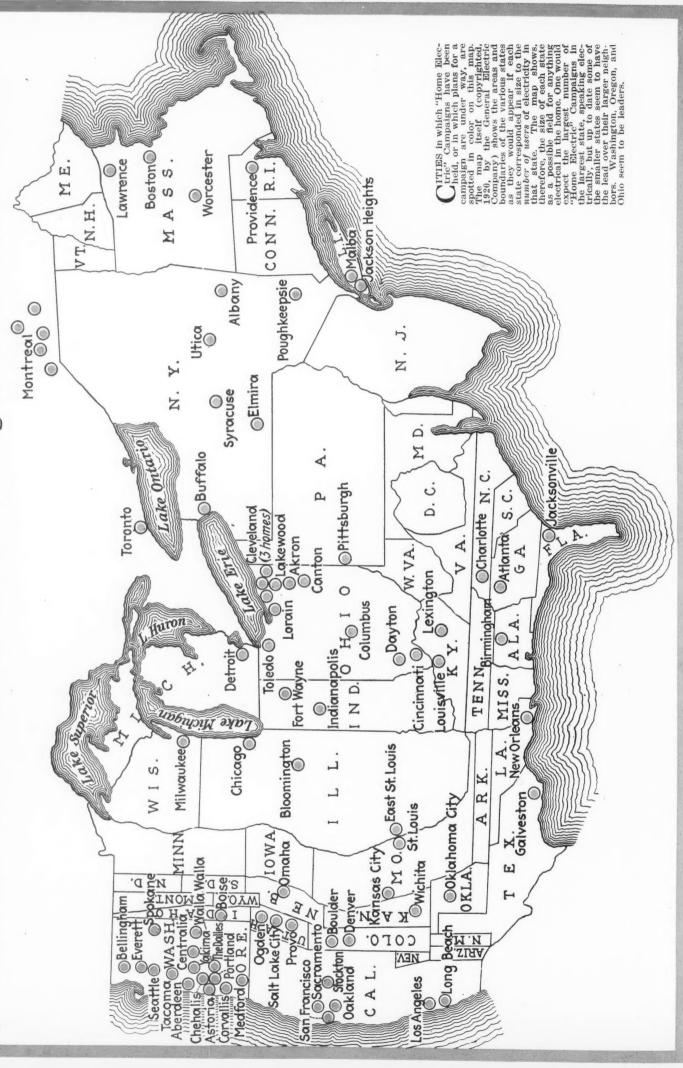
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Where the "Home Electric" Idea Is Building More and Better Business



Electrical Merchandising

The Monthly Magazine of the Electrical Trade
With which is incorporated ELECTRICAL MERCHANDISE

Volume 27

March, 1922

Number 3

A Campaign that Is Making

"An America of Electrical Homes"

A Record of Home Electric Achievements in the Year Past and Prospects for the Year to Come

NE of the most extraordinary campaigns ever undertaken by an industry is rounding out its first year this month. For March, 1922, marks the close of the first year of "Home Electric" campaigning on a national scale and the beginning of the second year's work on the same lines.

The results of the year are, briefly: Nearly eighty Homes Electric in almost as many cities, built, equipped electrically, and opened for public inspection, or soon to be opened; and close on to 1,000,000 visitors to those homes in a year, with another million as the goal for the coming year!

Nothing just like this campaign, probably, has ever been done before. Yet it is evident that many men within the electrical industry even now do not appreciate the magnitude of the achievement. To induce almost a million people—just folks, with time on their hands which they might much have preferred to spend at the movies — to pass through a demonstration Home Electric—to inspect home comforts and conveniences electrical-to listen to talks on things electrical—is a splendid achievement. And all this is in a day when it is a common cry that "People don't want to think nowadays —they just don't want to learn." People do want to think, and people do want to learn, as the Electrical Homes have proved.

The situation that brought about this unique campaign was simple enough. There was great need and a great undeveloped desire for a more adequate electric service in the homes of the country. But the public as a whole had not as yet been able to visualize the complete electrical home, and had not been given the means to do so. A Home Electric, exhibited through the cooperative efforts of electrical and real estate interests, provides the means for this visualization. Already, in these seventy-odd cities, the electrical home has been introduced "in the flesh," so to speak, to a million home-makers as the logical next step forward in the development of the American home.

That work has been going on for at least a year, and promises to continue indefinitely. The results are showing in these cities in a growing demand by an understanding public for the better wiring that alone can give complete electric service. Every Home Electric on the map can be the forerunner of a score, a hundred, or a thousand electrical homes in its vicinity. And that, after all, is the goal of the entire campaign—"An America of Electrical Homes!"

"Two Million People to Visit 200 More Homes Electric in 1922"

Plan Now for a Home Electric Campaign in Your Town This Spring-Make Every Visitor a Better Prospect for Adequate Wiring and More Appliances

ERE is the what, and the why and the how of a big idea—a master business-development plan for the electrical industry in 1922-a plan that ties together the electrical industry and many other lines of business, including the great real estate interests and the newspapers-in the common purpose of getting houses built, getting them electrically equipped, and then getting them sold.

The "Home Electric" idea means an aggressive sales campaign in a local community, which gets houses wired in bunches, and wired completely.—which demonstrates to hundreds of thousands of the public the convenience and economy of electrical devices, and which enlists the help of the powerful real estate interests to sell the electrical idea to the public, particularly home buyers.

"Here's the way the "Home Electric" idea is worked in California, where it originated:

A committee of electrical men calls on a local home builder who is putting up houses in a desirable section of town and proposes that one of these houses be wired with a full set of convenient outlets, etc. When ready, this house is equipped completely with furniture, electrical appliances, clothes washer, dishwasher,

range and all other devices that make weeks or so, during which time that's just the beginning.

Next, news articles and advertise-



Symbols, like the seasons, may come; and symbols may go; but the symbol of a great ideal sometimes lasts through the centuries. Within the electrical industry the credit for originating and establishing a truly inspired symbol belongs to the California Co-operative Campaign, under whose guidance the "Home Electric" movement was initiated. The four black quadrants represent the four great branches of the industry—central stations, jobbers, contractor-dealers and manufacturers. Binding them together with a bond of mutual interest is the white circle of "Better Service to the Public." Long live this symbol!

ments appear in the local papers, explaining that the wonderful model "Home Electric" in the new Love-Nest Addition of town will be thrown open for public inspection for two

it a complete "Home Electric." But everybody is invited to come out and see it. A committee of electrical men is on hand at the house to demonstrate the appliances and answer questions. Advertisements are also run in the papers by the real estate people, daily stirring up new interest. In California the results almost invariably have been that:

1. Thousands of people have come out to inspect the new houses for each one couple that would have inspected an ordinary real-estate development,

2. The "Home Electric" itself. complete with everything, was usually sold outright the first day or

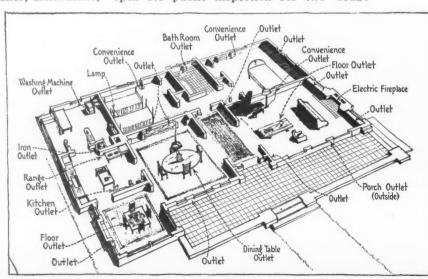
3. The neighboring houses and lots were rapidly disposed of and

4. Thousands of people were introduced to a practical demonstration of electric conveniences.

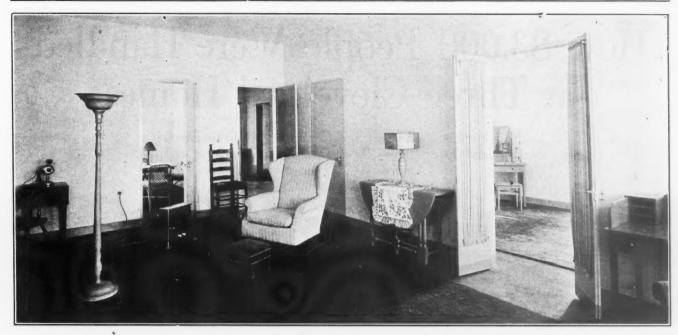
This "Home Electric" idea, then, is a campaign plan that offers tremendous wiring and appliance development possibilities right now in every community.

Start a "Home Electric" campaign in your town. Help the electrical industry as a whole to set and reach the bogey of "Two Million People to Visit 200 More Homes Electric in

With plans like this California is carrying to every home in the state the message that electricity is the modern servant in the American home, that electrical appliances add convenience, comfort and beauty to any household, and that to use electricity most effectively the home must be properly wired.



Because, men. to a large extent, still talk in pictures, one dia-gram is worth a in pictures, one diagram is worth a score of long-drawn-out pages of dry read in g. To get across the Home Electric idea in your town, tell it in pictures—pictures in the newspapers, at the movies, in folders, on signboards, and in a dozen other places.



In California the electrical industry is not a drive for electrical apartments. Holly-content with electrifying bungalows, cotwood has made a good start, as in the apartages and residences, but has now started ment shown. And in the early spring Oak-

land will see the completion of the first of a chain of million dollar apartment houses, all fully electrified for all conveniences.

California Electrifying Every Home

Home Electric Idea Is Putting an Average of Six Convenience Outlets in Every Five-Room House and Ten Outlets in Five-Room Apartments

ALIFORNIA is cashing in on its electrical home campaigns. Hampered by a building strike which forced it to forego two more homes in the San Francisco Bay region during the fall, the California Electrical Co-operative Campaign has devoted its activities toward an intensive drive among architects and contractors, proving to them that the building public has been sold on the idea of the "home electrical."

And this campaign among the architects and builders has borne fruit, not in the sense that every home which is being erected at the present time is as completely electrified as the exhibition homes, but it can be safely said that 99 per cent of the homes are electrified in that they have at least one convenience outlet for each room. Nor is this a haphazard statement, for it has been proved by surveys conducted by cooperative campaign officials in both Los Angeles and San Francisco, where the major portion of the home building is taking place.

The survey was not made of the so-called high-priced homes, those costing \$10,000 and upward, but of the homes of the average man. In San Francisco and the surrounding

random during the month of December, showed astonishing results, proof positive that the electrical home idea has been well worth the amount of energy which has been devoted to it. This survey showed:

Ninety per cent of the homes included in this survey had ample space provided for a laundry with at least two convenience outlets available for an electric washer, ironer and iron. The survey showed further that the minimum number of convenience outlets in any of the homes investigated was two and the maximum number fourteen.

In Los Angeles the survey has not been completed, but a sufficient number of new homes have been investigated to confirm the figures gathered in and around San Francisco.

The survey covered apartment houses also. What is conceded to be one of the most exclusive apartment houses in the state, being erected on the shores of Lake Merritt in Oakland, and which will be completed early in the spring, shows even more vividly

residence areas 120 homes, chosen at that the conveniences made possible through the use of electric appliances are being demanded by the public. This apartment house will contain forty apartments of five rooms each, which will rent for a minimum of \$125 per month. Each apartment has at least ten convenience outlets located as follows: Three in the living room, two in each bedroom, two in dining room and one in the kitchen. The apartment house will contain forty individual rooms for servants, a completely electrified laundry in the basement and a service garage which will cost \$35,000.

There's "Happiness in Every Room!"



A man of brains is James Eleet, His Home Electric's so complete, His wife asserts it is abloom With happiness in every room!

How 83,000 People Were Handled at Three Cleveland Homes

Each Visitor Listened to Six Short Talks on Domestic Electrical Service and Equipment—There Was No Repetition and All Questions Were Answered — Three Men and Five Women Guided All Guests Through Without Crowding or Confusion

By EARL E. WHITEHORNE

HE experience gained in Cleveland with three "Home Electric" demonstrations in 1921 offers some valuable suggestions for any city planning a "Home Electric" cam-Three paign. houses were

One was exhibited in May and June and two in the fall. Each campaign covered a different type of house in a different locality and each was a successful effort. These three "Home Electric" demonstrations were features of a year's campaign which was developed and conducted by the Cleveland Electric League, under the guidance and direction of J. E. North of the Cleveland Electric Illuminating Company, whose time is given up entirely to the promotion of co-operative work among the electrical men of Cleveland. Other features of the campaign were a school for salesmen, a scholarship contest, industrial and commercial lighting demonstra-



The first "Home Electric in Cleveland was valued at \$37,000 and was located in one of the best residential sections of the city. It was sold on the last day the house was open to the public.



Careful management was needed to handle tric" campaign depends on the human electrowds like this one which visited the three ment involved in routing visitors through electrical home demonstrations in Cleveland, the house, instructing them electrically and For the success of an entire "Home Elec- in answering their questions.

tion and an elaborate program of publicity.

More than 83,000 people visited these three homes and the problem of handling that great number of people successfully was not an easy one by any means.

Jack North told me that the problem of receiving such large numbers of guests and showing them through the house in such a manner that each one was sold the idea of complete electrical equipment was the most vital problem which the League had to work out. The arrangement of these houses made it possible to route the traffic through the house in a continuous stream, but it was found that this would not do. To tell the story properly of a home electric it is necessary to hold the guest at several points long enough to deliver a short talk. It was therefore found necessary when crowds were large, to admit the guests in groups of fifteen. And this is the way it was done, using Home No. 2 as an example:

How Guests Were Routed Through House

A doorman received the guests in parties of fifteen and directed them to the living room. He acted as the traffic man for the first floor, operated a hand counter to keep accurate count of the attendance and kept

out all unaccompanied children or other undesirables. In the living room a girl greeted the guests and gave them a little talk on home lighting and convenience outlets to develop in them a general interest and

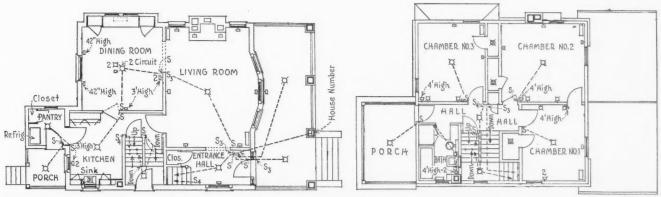
lead them to observe these details as they passed through the house. She pointed out the portable lamps, the electric piano and phonograph, the electric logs and a fan on a hanger.

This talk lasted about five minutes and the group passed through the sun room back through the living room and upstairs into bedroom No. 1. No lecture was given here



The second home was located in a more exclusive residential section. It was valued at \$48,000 and was sold during the second week it was open for inspection.

and there were no appliances displayed, but after inspecting the room they passed on to bedroom No. 2 where a little talk was given by a woman demonstrator on the heating pad, blanket, vibrator, sewing machine, radiant heater, bed and dresser lighting brackets, elexits and convenience outlets. All these features were on display in this room. Then the visitors went to bedroom No. 3, where they listened to another girl talk on the master switch, curl-



First and second floor plans for the third Cleveland "home electric" are here shown. The plans for wiring call for an electrically

lighted house number and for an outside switch controlling the porch light as well as for an inside switch for the same light.

The plans carry other helpful suggestions for any one who is planning the wiring a modern electrical home.

ing iron, hair dryer, vacuum cleaner, girl who showed them the range, milk warmer, and convenience out-No. 4, where again there were no appliances on exhibit.

During busy periods there a man was stationed in the upper hall as traffic manager of the second floor, who received a signal from the man in the lower floor when the dining room was ready to receive the group of guests from bedroom No. 4. In the dining room a woman talked to them on the lighting fixtures, teapot, coffee percolator, toaster, egg boiler, fan on hanger, floor outlet, candle-



The third home was built in a community of more modest dwellings and was valued at \$17,000. It also was sold during the second week it was open to the public.

sticks on buffet and outlet on the wall located 36 in. above the floor for convenience in connecting heating appliances and cleaner. The demonstrator then passed the group through the breakfast room on their way to the kitchen, directing their attention to the waffle iron and grill and the triple receptacles installed on a level with the breakfast table.

The crowd passed through this breakfast room unaccompanied, but were met in the kitchen by another

dish washer, power table, refrigerlets, and then passed on to bedroom ator, water heater switch, flatiron and pilot lamp, and made a short talk about labor saving by the use of electrical appliances. From there they went to the basement, where a man received them and gave a brief lecture on refrigerator equipment, the clothes washer, centrifugal dryer, electric air dryer, ironing machine, water heater, ice cream freezer, bell ringing transformer, furnace regulator, stationary vacuum cleaner and foundation meter box. Here also the visitors filled out the registration cards that had been given them when they entered, and deposited them in a box. Then they passed up and out the back door with directions to read the meter from outdoors as they passed by—it was marked by a prominent sign on the side of the house—and to inspect the electrically equipped garage.

Training Demonstrators

It had been the idea originally, Mr. North said, to man the house with salesmen and demonstrators lent by the various interested dealers and jobbers, but it did not work. It was impossible to restrain their salesmen from talking up their own goods. But the purpose was to sell an idea, not appliances, so they had to build up a crew picked up here and there. One was a combination janitor, mechanic and basement lecturer, a versatile handy man who proved invaluable. The girl in the dining room was an old experienced demonstrator. The rest were taken green and schooled to the work and they proved most effective. Technical questions were avoided because such discussions delayed the traffic, so people were referred to the book

which was given out as they left This proved entirely the house. adequate. Questions in regard to the cost of building were taken care of by a representative of the builder. who had an office on the back porch.

How the Advertising Was Managed

The matter of advertising was extremely important and the very remarkable success of these three Cleveland houses was largely the product of good publicity. It was found that in a city like Cleveland about 700 in. of newspaper space is needed to put over a "Home Electric," costing about one-third of the entire expense. On the first house Cleveland spent \$6,700 for all expenses, on the second house \$5,000 and on the third \$3,000. For the first house the idea had to be sold while the second and third demonstrations were "follow-ups." The League used 90 in. in the newspapers the day before the opening, 90 in. on the opening day, and 20 in. on the day following and every day thereafter. It totaled about 700 in. for the thirty-day exhibition.

There's "Happiness in Every Room!"



For instance, in the kitchen, where The Missus cooks their tasty fare. She gives a natty switch a turn And knows the meat will never burn. A washer only waits her wish To bathe and dry each dirty dish. Her kitchen never harbors gloom There's happiness in every room!

The Story of Canton's

Whirlwind Electric Home Campaign

Showing that, When Necessary, a Single Week Is Long Enough for a United Team to Plan, Equip and Put Over Successfully a Home Electric

N MONDAY morning it was just a plain, unfurnished, unfinished substantial little house in Maryland Park, Canton, Ohio—waiting disconsolately to be looked at by prospective buyers.

At noon the following Sunday—just seven days later—it was a harmoniously furnished, completely equipped Home Electric, delivered over by the Electrical League of Canton for the eager inspection of some 4,000 Cantonians who fairly clamored for admittance!

Here is a record for quick performance in conceiving, planning and putting over a Home Electric! That month's work, done in less than seven days, brought to the Home almost 10 per cent of Canton's population. Summarized, here are the achievements of that strenuous week:

Seventeen billboards were put up, seven of which were lighted at night.

Posters, numbering 4,500, were placarded on trees and poles in one night.

Invitations to visit the Home were sent out by each company participating.

Full-page and half-page ads were run in local newspapers.

All company trucks were decorated with banners announcing the opening of the Home Electric.

The Home itself was wired, furnished and equipped.

A street for a distance of eight blocks near the Home was lighted.

Eight floodlights were installed to direct the way to the Home.

Free car service was arranged for the opening day, the cars having big banners on them.

Know any record to beat it? These fellows in Canton didn't have any time, evidently, to get into the talking stage where the Electric Homes and electrical brotherhoods of some other towns have got themselves embogged. They just went ahead and did it, and consequently not only didn't lose the zip and pep that insure success, but saved money, too.

To be sure, they had an incentive which accounted for their speed. Here's how it came about:



This block of 250 new houses on the outskirts of Canton was in a fair way to sleep through the winter without so much as a look from a homeless cat, to say nothing of prospective buyers—until some one suggested fitting up one of the houses as an exhibition Home Electric. The Electrical

League took over the job that same day, and after the busiest week of its history threw open the doors to the public. Has it earned the speed record in the electrical industry's Home Electric campaign? We'll say it has! One week's work brought 10% of Canton's population to the house.

A large manufacturing company had built 250 houses about two years ago (when the boom was on) and was now unable to dispose of them. The houses were in Maryland Park, a suburb of Canton. This was last November. The problem was, to get people to come out of the city to look the houses over before the cold weather came. Some one thought of a three-ring circus, another suggested a big feed. But one brilliant member got his brains working and evolved 'Home Electric" as the answer. A week later that Home Electric-one of the original 250 houses - was thrown open to the first 4,000 vis-

It was something of a task, as may be imagined. The Electrical League of Canton, of course, was the first to be called on for co-operation by the builder. The chance to show the public a real Electric Home, without the expense of building one, was too good to be missed, and the League went to it with vim, even though its work had to be done within a

week. It undertook the rewiring, making a seven-circuit house, and supplied the electrical appliances and lighting fixtures for every room. Local furniture merchants provided the furniture and art goods.

All this called for real team-work on the part of dealers and builders. There were doubters, too, to be convinced, and some had to be shown pretty thoroughly before the necessary co-operation was assured. Then there were meetings to be held, plans to be laid, and so on.

Aside from the publicity work arranged for in that week (including newspaper ads, billboards, posters, and floodlighting the Home) the thing the League is proudest of is that the final product was a real home. Not a hodge-podge of storemarked furnishings, or of a pretentiousness obviously beyond the reach of the average visitor, it impressed everyone, particularly the women, as meeting average conditions and being within the average householder's means.

Methods and Ideas to Help You Plan a "Home Electric" in Your Town

Here, in Tabloid Form, Are Some of the Methods Successfully Used So Far in Building, Equipping, Gaining Publicity for, and Running, Electric Homes

Coming to the Builder's Aid

CANTON, OHIO—Canton's Home Electric was the result of an appeal by a builder to the Canton Electrical League. He had 250 new houses in a suburb, waiting for prospective buyers to come out and look them over before the cold weather. One person suggested a circus, another a big feed, but a third hit on a Home Electric. The Electrical League rose to the occasion, and a week later the Home was open for exhibition.

Take Advantage of Local Shows!

MILWAUKEE, WIS.—A food, household and electrical exposition was held in the Milwaukee Auditorium, and the Milwaukee branch of the Wisconsin Association of Electrical Contractors and Dealers took advantage of the occasion by equipping a Model Electrical Bungalow at the show,

Using a Builder's Own Residence

Salt Lake City, Utah—Here a local building contractor had just built a new house for his own residence. The Rocky Mountain Electrical Co-operative League paid him \$500 for the use of the house for two weeks as a demonstration Home Electric. The owner provided the furniture for the house, but the league supplied the electrical equipment and paid for the wiring, with the exception of \$150.

As the Feature of an Electric Show

SPOKANE, WASH.—At an Electric Show held that week under the auspices of the local electrical fraternity a model four-room Home Electric was the feature of the show. It was completely equipped with electrical appliances, and proper lighting and adequacy of outlets were emphasized.

A One-Man Job

LAWRENCE, MASS.—The Home Electric here was a one-man job, being exhibited by a local contractor-dealer who did the wiring and supplied the electrical equipment himself. He obtained the use of a new house, on payment of a small fee to the owner, and it was furnished completely by local furniture dealers.

Loaned by the Architect and Owner

ASTORIA, ORE. — The Astoria Electrical Home was not a residence built for sale, but was obtained for demonstration purposes by an appeal to the civic spirit of the architect and the owner, made by the Northwest Electrical Service League.



Did the Wiring Gratis

OGDEN, UTAH — To obtain a house here, an agreement was made with a local builder to do the wiring gratis in return for the privilege of having open house for ten days. Thus the only expense was the cost of wiring and the necessary advertising.

As Part of Good Homes Exhibit

Toledo, Ohio — This Home Electric grew out of a "Good Homes Exposition" held by local real estate men. The Toledo Edison Company, when approached for a contribution of some kind, arranged to equip electrically one of the homes on display. This home became the "electric home" of the exposition. Thirty electrical contractors cooperated by booths around the electric home, paying the regular rate.

Form a Corporation

DENVER, Col.—In Denver, where an Electrical Home is to be opened in March, local building conditions made the usual co-operation with real estate interests unfeasible, so the Electrical Co-operative League has formed an Electric Home Building Corporation of its own, consisting of members of the league, to construct the home. Building material interests have taken stock in the home in part payment for material used in building the house.

Get a House Donated

BOULDER, COL.—The Electrical Home which is shortly to be opened here is the new residence of the manager of the local power company, the use of which he is donating for the purpose.

Give Talks to Local Clubs

ASTORIA, ORE. — Timely talks about the Electrical Home were given before the Ad Club, the Rotary Club and the Kiwanis Club.

Inclose Announcements with Mail

OGDEN, UTAH—Slips telling about the Electrical Home were inclosed with the power company's monthly electric light bills

To Hold "Electrical Week" at Same Time

PORTLAND, ORE.—In connection with the Electrical Home which is shortly to be opened in Portland the electrical interests there are planning to have an "Electrical Week." Speakers will address clubs and organizations, and special window displays will be arranged for both electrical and non-electrical stores.

Burglaries, Fires and Weddings Might Liven Things Up

ATLANTA, GA.—Nothing less than a burglary, a fire and a wedding are going to enliven Atlanta's Electrical Home exhibit when it is opened shortly. There will be a burglary, the burglar being detected by an electric burglar alarm; and the fire will turn on an electric fire alarm; and the wedding will take place in the home. Stunts like these are often more effective than direct newspaper advertising, believes the Atlanta Electrical Association, which has already been assured of space by local newspapers.

There's "Happiness in Every Room!"



And in the dining room there sit, Appliances with cords that fit The outlets in the table, or The baseboard, chair rail, or the floor; On waffles Jimmy loves to sup. (It takes fourteen to fill him up).

He's thankful here, we may presume, For happiness in every room.

Hold an Essay Contest for Housewives

CLEVELAND, OHIO — Prizes were offered for essays and suggestions submitted by housewives to the electrical pages of newspapers. In this way the Home Electric got itself talked about wherever women met and enlisted the active interest of hundreds of them even before the home was opened.

Have the Home Christened

CLEVELAND, OHIO—Cleveland's first Home Electric was officially christened on the opening day by a high school girl, selected after a voting contest to determine the most popular high school girl in Cleveland.

Billboard and Poster Publicity

CANTON, OHIO—Seventeen billboards, seven of them lighted at night, were put up in Canton, advertising the Electrical Home, and the city was placarded in one night with 4,500 posters.

Of Course, It Must Be Floodlighted!

UTICA, N. Y.—Utica's Electrical Home was floodlighted every night, making it stand out in the darkness for blocks around.

Have a Flag Raising

CLEVELAND, OHIO — Another "stunt" they tried in Cleveland to win the interest of the women was a flag raising on the opening day, the flag being raised by the president of the Cleveland Federation of Women's Clubs.

Invite the Women's Clubs

CLEVELAND, OHIO — Members of 130 women's clubs in Cleveland received special invitations to visit the first Home Electric, and a schedule was made of visiting days for the clubs, which was announced in the daily newspapers.

Let Each Company Truck Be a Traveling Signboard

CANTON, OHIO—Before and during the period the home was open all trucks of the companies participating were

There's "Happiness in Every Room!"



Their living room has shaded lamps; Great lumens grow from little amps. Electric music's handy, too—Piano or Victrola. You Can touch a switch and hear, at ease, Soprano artists cross the C's. We envy Jane, a girl for whom There's happiness in every room!

decorated with banners announcing the event.

Free Trolley Rides to the Home

CANTON, OHIO—On the opening day, by an agreement with the local traction company, there was free trolley car service on the line leading to the home, and even the cars were decorated with banners telling about the home.

Have the Mayor at the Official Opening!

TORONTO, CANADA—To open Toronto's Electrical Home with proper éclat, Toronto's Mayor was invited and delivered a speech to welcome the first guests. Another feature of the day was the formal opening of the door of the home by the president of the largest women's club of Toronto, with a golden key, presented to her as a souvenir of the occasion.



Invitations to visit the second Home Electric in Cleveland were printed on the address side of the monthly customer statements mailed out by the Cleveland Electric Illuminating Company.

Don't Forget the Ladies of the Press

TORONTO, CANADA — Special cards were sent to the women's page editors and women reporters of all local newspapers to visit the home, many of whom featured the story on succeeding days.

By All Means, a Movie Star

CLEVELAND, OHIO—A movie actor or actress always draws crowds anywhere, and Cleveland proved the drawing power of this attraction by having Clara Kimball Young present on the opening day.

A Map to Show the Way

UTICA, N. Y.—Circulars distributed before the home was opened contained a map showing the location of the house, the various landmarks near by and roads leading to it. Also, arrows announcing that the home was open and indicating the direction of the route to it were placed on poles all over the city and along highways in nearby towns and villages, within a radius of 25 miles.

Select Appliances by Lot!

SALT LAKE CITY, UTAH — All electrical appliances exhibited in the home were selected by a drawing, and special mention was made to visitors that "other appliances, equally as good, could have been chosen."

Get Every One's Suggestions!

DENVER, Col.—In Denver, to decide what electrical appliances were to go into the home, the committee sent out requests to all members of the Electrical Co-operative League for suggested lists. The replies were checked and a complete list made. Then drawings were held to decide which company was to supply each appliance. When one firm drew one of the major appliances, such as the range or clothes washer, it was precluded from further drawings in that group of equipment.

Wired Furniture and More Convenience Outlets

TORONTO, CANADA—Wired furniture, which is attracting more and more attention as its purpose—the supplying of more convenience outlets—is becoming better known to the public—had its place in the Toronto Electrical Home. The dining room table and tea wagon were wired, and demonstrators showed the additional convenience afforded in the serving of meals.

Name Cards for the Devices on Display

Utica, N. Y.—It's always surprising how many persons there still are who cannot recognize the familiar electrical labor-savers at sight. In Utica's Home this was taken care of by having a small card on each appliance, stating the name of the device (not its trade name, or the manufacturer's, but simply what it was). The card also carried the operating cost of the device an hour.

Radio as an Attraction

PITTSBURGH, PA.—In the Electrical Home which is to be opened to the public in April under the auspices of the Pittsburgh Electric League a complete radio receiving set installed in the house is expected to be one of the biggest drawing cards.

Follow Up the Building Permit Lists

Hamilton, Ont.—To urge the necessity of proper wiring upon persons about to build, the home committee of the Hamilton Electrical Development League is mailing to every person who obtains a permit from the Building Inspection Department for the erection of a home a folder on house wiring. This insures reaching prospective builders before it is too late for them to change their plans.

Have Prices of Appliances in Souvenir Booklet

MILWAUKEE, WIS. — Believing that prices were an important matter with most folks, yet desiring to keep a commercial atmosphere out of the home itself, they decided, in Milwaukee, to print the prices of the electrical devices on a page of the souvenir program, which was distributed to visitors.



To have a line of visitors like this patiently awaiting their turn to enter a Home Electric is no mean feat, and in Cleveland, where this picture was taken, a well-thought-out publicity campaign accomplished the result. Aside from the feature

newspaper advertising, arrows were posted throughout the city pointing the way to the Home; and circulars were widely distributed containing maps showing all routes to the Home. Advertising cost about one-third of the entire expense for the home.

"How to Plan an Electrical Home"

SALT LAKE CITY, UTAH—"How to Plan an Electrical Home" was the name of an attractive booklet distributed to visitors. This booklet emphasized the need of adequate wiring, reproduced the wiring plan of the home and gave three pages of "Things to Be Remembered When You Wire an Electrical Home."

Put the Home Up for Auction!

LOUISVILLE, KY.—The "big day" of Louisville's Home Electric exhibit was the day the house was sold at public auction for the builder. More than a thousand gathered for the event, and the house, though built to sell for \$11,000, was knocked down for \$15,025.

A Hostess Will Smooth the Way

ASTORIA, ORE.—Astoria was fortunate in getting the wife of a leading citizen, not related to the local industry, to act as hostess at the Electrical Home. "What is a home without a woman at the head of it?" they reasoned, and the plan proved to be one of their happiest inspirations.

Domestic Science Students as Demonstrators

THE DALLES, ORE.—The last hint of commercial atmosphere was taken from the Electrical Home at The Dalles by having as demonstrators seniors from the high school domestic science department. These girls were quickly trained, enjoyed the work, and did far more to make visitors feel at home than would professional demonstrators.

Ten-Day Bungalow Campaign in Boulder, Col.

IN LINE with the general policy of acquainting the public with the many uses to which electricity can be put in a home, through an "Electrical Home Campaign," the Electrical Co-operative League of

Boulder, Col., will exhibit a model electrical home for a week or ten days in March. The house to be used is a five-room bungalow with garage and laundry in the basement and is being built for F. S. Henderson, manager of the Western Light & Power Company, who will donate its use for the period of the demonstration. The house is well designed and will be tastefully and artistically furnished by the leading furniture companies of Boulder. A total of forty-two electrical appliances will be displayed and guides will explain their uses. There will be forty-six convenience outlets and twenty switches.

Great care is being exercised to see that none of the elements contributing to the success of the campaign are overlooked. Considerable publicity will be obtained through local newspapers, and personal invitations will be sent out to residents of the city. The leading social clubs, including the Woman's Club and the Domestic Science Club, will act as hostesses at this electrical home on various days during the campaign. The domestic science departments of the University of Colorado and the State Preparatory School have been invited to take advantage of the educational value of this campaign by learning the uses of the various time and labor-saving electrical appliances through a visit to the "Home Electric." Precautions will be taken to impress upon the visitors that every appliance and wiring installation demonstrated are necessary to provide the "real" home and that the numerous convenience

outlets and switches were not installed especially for this demonstration.

The campaign is one of education and no electrical appliances will be sold during the demonstrations. Prospective home-builders will be encouraged through the exhibition to have their houses wired so that all the appliances shown can be installed.

One Convenience Outlet to Seven Rooms

In a survey conducted under the auspices of the lamp committee of the Association of Edison Illuminating Companies during the 1921 summer, it was found that in five cities—Boston, Chicago, Detroit, New York and Rochester—among moderate-priced homes, the number of convenience outlets per hundred rooms (excluding attics and cellars) was fourteen, which is a somewhat larger proportion than that estimated by ELECTRICAL MERCHANDISING for the country at large—one oulet for every seventeen rooms.

The committee's findings are summarized as follows:

	Houses	Apart- ments	Com- bined
Rooms inspected	5604	7291	12895
Convenience outlets	1084	720	1804
Convenience outlets			
per hundred room	s 19.3	9.9	14

This indicates a ratio of one convenience outlet to every seven rooms in the cities named.

An outstanding feature of the findings was that the convenience outlets in Rochester were from three to four times as numerous as in the other cities.

There's "Happiness in Every Room!"



Upstairs you'll find the outlets for Attachments growing by the score. When aches or chills make living sad, Jim plugs the trusty heating pad, And later on the skeeter clan Is banished by the whizzing fan. No need to wag the dusty broom With happiness in every room!

Denver Finances a Home Electric by Selling Stock in the Home

Undaunted by the Unwillingness of Real Estate Dealers to Co-operate in a Home Electric Campaign, the Denver Electrical Co-operative League Organized Its Own Company and Incorporated for \$25,000— Money Was Raised at Once, and the Big Job Is Nearly Finished Now

By S. W. BISHOP
Executive Manager Denver Electrical Co-operative League

ECAUSE local real estate dealers were unwilling to co-operate, there remained only two possibilities of putting over an electrical home in Denver. The first of these was to get in touch with somebody who was building, preferably somebody within the electrical industry, who would be entirely in accord with the idea and who would allow of the usage of his home for display purposes. Several prospects in this line did not materialize, with the result that it was definitely decided to take direct action by organizing a corporation to finance, build and display the home.

This is how it was done. Members of the Denver Electrical Cooperative League advisory committee, to give prestige to the movement, secured the personal indorsement of the general manager of the local central station and the resident managers of the two large electrical manufacturing companies, and a

Denver's electrical home has been modeled along the California-Spanish lines of architecture. It will have seven rooms, a sleeping porch, a complete basement, and a garage. Of the 165 outlets more than forty will be of the convenience type. It is planned to open the house for public inspection during March. The Denver Electrical Co-operative League plans to erect other homes fully equipped with convenience outlets for the use of electrical appliances in various districts of Denver and in other cities of the state as soon as the present undertaking is completed.

There's "Happiness in Every Room!"



And in the laundry, down below,
The linen's washed as white as snow.
And even when the dirt is thick,
Electric washing does the trick.
The busy ironer takes each crease
Away from laundry, piece by piece.
No laundress here to fuss and fume—
There's happiness in every room!

meeting was called. A corporation known as the Electrical Home Building Company was formed, of which the individuals just referred to were made the directors and were elected as president and vice-presidents, respectively. Owing to the fact that all details concerning the building of the home would pass through the hands of the Electrical Cooperative League, the executive manager was elected secretary and treasurer of the company.

Articles of incorporation provided for the issuance of \$25,000 of capital stock, and of course the corporation was made one for profit in order that the greatest latitude could be secured for its operations without the disadvantages accruing to non-profit corporations. At the time of the incorporation meeting the original subscription lists were opened and \$1,500 was pledged. Shares were to sell at \$10 each and

immediately thereafter wide publicity was given to the industry in Denver asking its support and individual subscriptions for stock in the electrical building company. Subscriptions have ranged from \$10 to \$250 and a total of \$6,750 was secured in this manner.

In the meantime a desirable building site was obtained and although there were insufficient funds in the treasury to pay for the lots, they were secured by warranty deed on a note given by the company through its directors, payable six months afterward, with a possibility of extension in case the house was not sold at that time. As originally planned, between six and seven thousand dollars would have to be raised to meet the payroll and labor costs to put the house in such shape as to be acceptable for a mortgage of sufficient value to insure its comRight here let me state that as originally anticipated we were successful in securing the co-operation of certain building material interests who are furnishing their products for use in the home, payment to be made entirely in stock or partially so, and a general result of these negotiations will allow the issuance of at least \$3,000 worth of stock for materials which otherwise would have to be paid for in cash.

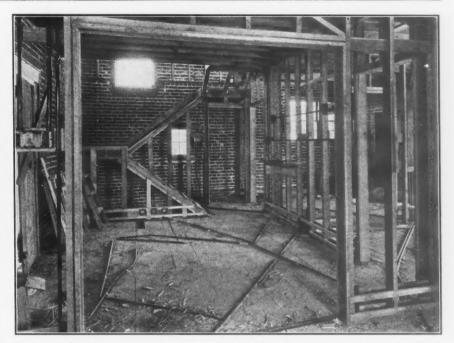
Certain building interests that were willing to help in a co-operative movement of this kind but would not accept stock in payment for their merchandise made concessions in discounts much larger than could be secured under any other circumstances.

In the case of those interests furnishing minor items such as weather stripping, hardware for the house, fire insurance, etc., outright donations have been obtained in consideration of the high-class advertising which will be given those interests when the home is completed and put on display.

The contract for building the house was made on a cost plus basis with a guaranteed maximum of cost and the contractor's participation was primarily due to his interest and the possibilities of the advertising which he, too, could secure from such an association. The general contract, lots, landscape gardening, and incidental expense, plus the cost of all the electrical work done in the home, will be close to \$20,000.

How Wiring Was Planned

Rather than have any one electrical contractor do the work in the home it was decided by the local contractor-dealers' association, which holds membership in an entirety in the League, that a committee of three contractors would be elected to superintend the wiring of the home. With the election of these men, estimates were made of the list of material required and this was turned over to a meeting of the seven jobbers, who are members of the League also. They made arrangements between themselves for the supplying of the material without profit to any of them, all material to be delivered to one of the jobbers, who was held responsible for the delivery of the material to the home as desired by the wiring committee. This wiring committee took on the best journeymen and helpers to be found in the various shops.



This interior view of Denver's first electrical home, taken while modern wiring job was in progress, shows the wiring methods in the living room, hall, stairway (to upstairs and basement) and kitchen. The doorway in the extreme right leads to the garage and to its right may be noted the

back of the main distribution cabinet which will inclose twenty-two circuits (a separate power cabinet for nine circuits does not show). This type of wiring is being encouraged in Denver—with conduit laid on false floor which will later be stripped and the permanent flooring placed over it.

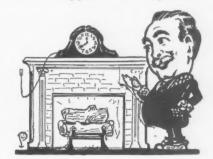
It is also interesting to note here the desire for participation on the part of the local electricians' union, which was given the details at one of its meetings relative to the financing of the home and its import to the electrical industry of Denver, with the results that the union made a goodly subscription from its own treasury and encouraged the individuals to make subscriptions also. One can readily see how this will develop additional interest in the home itself and the possible advertising which will come through the efforts of the nearly 200 subscribers, including the journeymen.

Roughing in the electrical work in the home has been finished. As soon as the plumbers and steam fitters rough in their installations the lathing and plastering will be done. The contractor estimates that the house will be ready within thirty days after that date, or about March 1. In the meantime, of course, arrangements have been made for further financing of the home through one of the local banks, of which one of the former advisory committee members and one of the leading contractors are members. A substantial first and second mortgage is available at that bank and when additional funds are demanded the League will accept the opening which has been presented through this banking arrangement.

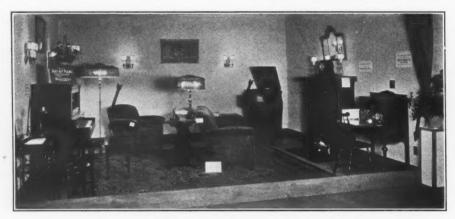
All responsibility in the building of the home has been centered in a committee of three from the advisory committee, known as the building committee. Together with the League manager they have handled all the details, the officers of the company being consulted only on matters of major policy.

Furnishing the home will be done in the same way that several of the California homes were furnished, namely, through the assistance of one of the leading house furnishing firms, which fortunately can appreciate the advertising value which will come from its being able to furnish the house throughout, without charge or obligation to the League or the Electrical Home Building Company.

There's "Happiness in Every Room!"



Throughout the house electric aid Has been invoked. No sulking maid Can leave and throw the place in gloom, There's happiness in every room!



A compact radio set, an electric phonograph, and electric piano, a fire log, and floor and table lamps were the features in the living room of the Home Electric Ex-

hibit at the Spokane Electrical Show in December. Aggressive "follow-up work" followed the close of the show, and now the local industry is profiting thereby.

Spokane Combines Home Electric with Electrical Show

United Industry Awakens Whole City to Importance of Electrical Homes, and Then Capitalizes the New Interests

PONSORED by the Northwest Electrical Service League, the combined Electrical Show and Home Electric Exhibit claimed the hearty co-operation of every member of the electrical industry in Spokane, Dec. 5-10. Its success is measured from three different angles of particular importance: First, there was a large attendance of substantial citizens, and the sales of electrical equipment were directly stimulated; second, the community was awakened to a consciousness of the importance of the electrical industry and of the electrical future of Spokane; and, third, the entire electrical industry was united in a common purpose.

In order to have the exposition entirely educational there were no booths by individual firms. Instead the exhibits were in groups by classes of equipment so as to afford a comprehensive display of the various "electrical servants" in compact units.

The "home electric" proved to be the most interesting exhibit and the most effective. It consisted of a four-room model home, furnished with practically all the appliances used today and arranged like a series of display windows.

In the living room there was a compact radio set, an electric phonopliances and portable quadruple plug. to qualities or prices. The washing

The women were particularly interested in the kitchen and the laundry. In the kitchen were displayed a range, water-tank heater, various food mixers and a dishwasher. This latter attracted much favorable comment.

The laundry, with its washer, ironer, hot plates and ironing board, was surrounded every afternoon and evening by women visitors.

In each room the proper type of lighting was demonstrated and the advisability of using the maximum number of convenience outlets was emphasized.

Another exhibit which proved of exceptional interest was the radio telephone display. In addition to other equipment two combination receiving and transmitting sets, furnished by the United Sates Forestry Bureau, were operated. Messages and music from other points in the city were received and amplified so that everyone in the hall could hear

A lighting fixture display, and others of portable lamps and illumination equipment for factories and offices, proved of interest to the visitors.

One side of the hall was practically given over to a showing of electric ranges and washing magraph, electric piano, fire log and chines. All the standard makes of floor and table lamps. The dining ranges were exhibited and demonroom emphasized the use of table ap- strated, without any comparison as

machines were shown in the same

Small appliances occupied the center of the hall and inspired many visitors with suggestions for holiday gifts. While no sales or advertising were allowed on the floor, a number of firms reported that people came directly from the show and asked for appliances they had seen

Christmas sales of all kinds of electrical goods increased measurably following the show. The people of Spokane were shown in a new way the advantages of "doing it electrically" and of giving electrical presents.

One of the smaller contractors reported that the day following their visit to the show some neighbors called on him and ordered a substantial convenience outlet job with a number of lighting fixtures and appliances, saying that they had seen it all at the electric show.

Due to the exceptionally favorable publicity incident to the show the community was aroused to a keen interest in the future of the electrical industry and to a realization of the vast possibilities for power development in the territory served by Spokane.

As a further result of the show the members of the electrical industry were brought together in a common cause as perhaps no other enterprise could have drawn them together. Everyone worked hard for the success of the show. As it drew to a close there was a unanimous belief that it should be repeated in 1922 and thereafter on a larger scale. The various branches of the industry came to understand each other better and to believe in the unity of the industry.

It would be impossible to place proper credit for the success of the show, since all the various firms and their employees worked together on whatever work was at hand. The executive committee consisted of H. T. Whitehouse, Washington Electric Supply Company; R. C. Steeple, Dorr-Mitchell Company; Aspinwall, Westinghouse Electric & Manufacturing Company; W. J. Currie, Washington Water Power Company; and H. C. Swann, city electrical inspector, and R. G. Emerson, field representative of the Northwest Electrical Service League, who had just come from the Tacoma Electrical Exposition and other electrical enterprises of a similar kind.

A Scientific Approach to Margins

Margin Enters Into Every Method and Every Agency of Distribution—It Covers a Payment for Performing the Functions of Distribution and a Reward for Such Performance-Margins and Prices Can Be Fair if Waste Is Eliminated All Along the Line

By STANLEY A. DENNIS

HIS day of national reconstruction has brought an hour of splendid opportunity to the pliances to the home. industry in America. Never before, perhaps, has industry, commerce, and domestic life stood in greater need of the service that can be rendered by electricity. In these days when we are re-establishing our national life, the big problem is to maintain and improve the best standards of American living and to establish these standards in more American homes. To a greater extent than any other agency perhaps, electricity affords the means for maintaining the physical elements in these standards without retailer-dealer or central station, increasing the cost of living. It is, therefore, the hour of splendid opfor the merchandising movement within the electrical in-

the distribution of wiring and ap-

It must not be forgotten that the hour of opportunity is also the hour of testing. If the merchandising movement means anything at all, it means wider and more economical distribution. That is the test of the movement. If the merchandising movement is to meet this test, it must free itself of all weights that would hinder it in performing the task before it. Not the least of these hindrances is the troublesome matter of margins—a seeming perennial difficulty that touches not only the but the jobber and the manufacturer also. Like the poor, it is always with us.

dustry—the movement that covers and even before then, the contractordealers took positive ground that the margin to the trade was too small, and they still hold to that position in a buyers' market. The jobbers hold that there may be some truth in the dealers' contention, and that it at least is open to investigation. The jobber also wants a larger margin. And to both the manufacturer says. "Why?" A disinterested point of view can well hold that a definite study of the question should be made by all—ALL the parties concerned.

May we not take the position that: The electrical industry through a joint commission of retailers and jobbers and manufacturers should make a thorough survey of methods and costs in the distribution of domestic electrical appliances, in or-When we were in a sellers' market, der to discover where wastes in such

Margin Enters Into Every Method of Distribution

Margin is payment for the cost of performance (overhead) plus a reward (profit) for doing it. The cost of distribution begins in the manufacturer's overhead. Distribution breaks into at least six broad funchead. Distribution breaks into at least six broad func-tions: warehousing, selling, transporting, financing,

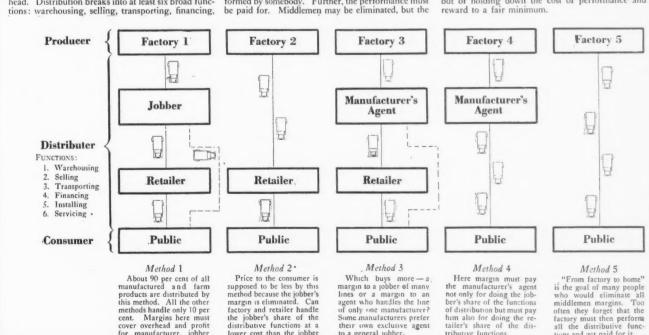
this method. All the other methods handle only 10 per cent. Margins here must cover overhead and profit for manufacturer, jobber and dealer.

and often installing and servicing. No matter how many middlemen there may be between the factory and the home, several or all of these functions must be performed by somebody. Further, the performance must be paid for. Middlemen may be eliminated, but the

functions and their cost cannot be eliminated. becomes, then, not so much a question of eliminating middlemen who are specialists on certain functions, but of holding down the cost of performance and reward to a fair minimum.

of distribution but must pay him also for doing the re-tailer's share of the dis-tributive functions.

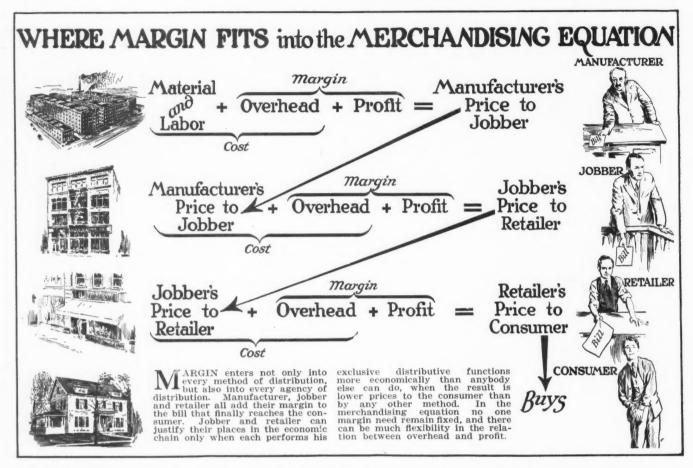
factory must then perional all the distributive functions and get paid for it.



Some manufacturers prefer

their own exclusive agent to a general jobber.

factory and retailer handle the jobber's share of the distributive functions at a lower cost than the jobber can?



distribution occur, wastes cost, what wastes can be presound foundation of facts on which each manufacturer can determine what are fair margins for any and all distributing agencies between himself and his consumer.

The contractors and dealers have already attempted to study their own part of the problem.

Economically, the central station stores are a trade group of the same rank with the dealers. If on their own initiative the central stations will also undertake a study of margins as they touch central station merchandising of electrical appliances and devices, -covering, of course, all elements of their merchandising overhead-the results of such a fourth party study will be invaluable in working out a solution of the margin problem.

Where Margin Fits into Merchandising

Let us hope, then, that within a little while the keenest thought in the entire industry shall be concentrated on the thorny problem of margins. Such an investigation can result only

what these knowledge can be his best friend, industry is concerned, however, and The same is true of an industry. for the purposes of this study, supvented and how, and to provide a If nothing else would justify such pose we say that distribution breaks studies, the need for definite facts on into at least six broad functions: merchandising methods in a buyers' market would do so.

If, then, the industry should undertake an exhaustive study of distribution, would it not be well for minimum number of functions of manufacturer, jobber, central station, and contractor-dealer to visualize, in a broad way, just where margin fits into merchandising? That seems to be the logical starting point. After that is done a more detailed study can be made of each of the elements that are involved in the actual setting of margins, such as: price, overhead, profit, turnover, return on capital, volume, and service rendered; none of which, however, can be developed in this article.

In Every Method of Distribution

Distribution is a broad term covering certain economic functions. Experts in marketing have attempted various definitions and clasone set of definition or classification

warehousing, selling, transporting, financing, installing, and servicing. Suppose we say that these are the essential, the necessary and the distribution within the electrical industry. Logically and in fact, it follows that in whole or in large part they enter into every method of distribution in the industry. These functions can not be performed without creating a cost in the performance and without creating a charge for the performance. The cost of performance and the compensation or reward for it, we call margin.

An effort to express this fact pictorially has been made in Chart 1. Not all of the methods of distribution have been shown, but all of the principal ones are diagramed. Margin enters into all five methods shown, and all of these methods are in use in the electrical industry. It sifications of these functions, but no is said on good authority that about 90 per cent of all manufactured and has been uniformly adopted. Per- farm products are sold through the haps such can not be done and per- first method. The other methods are in benefit to all concerned. Ignor- haps it is not desirable that it should the result of attempts to simplify ance can be a man's worst enemy, but be done. As far as the electrical what has been regarded as an unduly tribution—to do away with the jobber, in fact. Too often in such attempts it has been forgotten that the functions of distribution can not be turer, jobber, retailer. Margin eliminated nor can their cost be done away with. Only the middlemen's profit seems possible of elimination, and even that assumption is open to question. If the jobber is eliminated his share of the distributive functions must be performed by the manufacturer, or his agent, and the retailer, or entirely by the manufacturer. Attempts to do this have thus far failed to eliminate permanently any of the functions of distribution. and only in a few manufactured lines has it been possible to reduce permanently the final cost to the consumer.

The significance of all of this for the electrical industry lies in the conclusion that any comprehensive and adequate study of margins by the industry will require careful attention to and consideration of the various methods of distribution and the part that margins play in each.

distribution. Take the common method by which most goods are distributed to the public-manufacenters into the part of the merchandising equation that touches each one of these productive and distributive agencies. Manufacturer, jobber and retailer all add their margin to the final bill to the consumer. The distributive functions begin in the factory and therefore their cost and the compensation for their performance begin there also. Hence as each agency performs, it adds its margin for the work done. An effort to indicate this fact diagramatically has been made in Chart 2.

Of course it must not be forgotten that the manufacturer's margin differs slightly in nature from the margins of the jobber and dealer. In a broad sense the manufacturer's margin does cover his overhead and his profit, but in a more special sense his first cost is made up of material plus labor plus factory overhead, and his margin in the narrow Not only does margin enter into sense is that part of his total overevery method of distribution, but it head which is strictly selling expense

long and expensive method of dis- also enters into every agency of plus his profit. It must be remembered that margins may increase in dollars and cents for each group in a sellers' market, and must likewise shrink in a buyers' market. It is worth while to note in passing, because we are now in a buyers' market, that when prices are falling and margins in dollars and cents are shrinking, business can not be financed nor promoted on the expectation that any one group in the merchandising chain can retain its large margin when other margins shrink. If that is attempted, failure lies in wait for that group. And yet at the same time, it must be remembered that even in a falling market margins must be adequate to cover the cost of doing business and also a profit, for each of the necessary groups performing necessary functions. As each group expands its margin going up, so each group must shrink its margin going down.

A Problem in Arithmetic

It may seem almost painfully academic to point out that the adjusting of margins, especially where the price to the consumer is fixed by

Margins and Prices Can Be Fair if Waste Is Eliminated All Along the Line

Where Surveys Must Be Made

Manufacturer



Factory Costs-Overhead-Profit Share of Distribution Costs Distribution from Industry to Industry

Finished products Semi-finished products Raw materials

Jobber



Overhead - Profit - Turnover Return on Capital Invested Volume of Wholesale Sales -By lines of merchandise

-By cities and states Census of Wholesale Outlets Retailer



Overhead-Profit-Turnover Return on Capital Invested Volume of Retail Sales

-By lines of merchandise -By cities and states Census of Retail Outlets

Consumer



Consumption Statistics

-In money

-In volume of goods

-By lines of merchandise

-By cities, counties and

Market saturation

to Discover and Stop Waste



Defective Material Poor Buving Inefficient Labor

etc.

Excessive Spoilage

Caused by:

Bad Inspection Inadequate Cost Systems No Cost Systems **Bad Debts**

etc.

Poor Location Small Leaks Mismanagement Consumer Carelessness etc.



the manufacturer, is first of all a costs of performing necessary disproblem in arithmetic. But some emphasis on this point is justified because it is necessary. Strange as it may seem, the fundamental arithmetic of the problem of adjustment is too often forgotten entirely by one or more groups that may be seeking adjustments. If the margins of manufacturer, jobber, and retailer are all too small, and must be increased, then either the price to the consumer must be increased accordingly, or the amount spent by the manufacturer on material or labor or on both must be reduced. If the manufacturer's margin is too small, then jobber's and retailer's margins must be shrunk, or material and labor decreased, or price to the consumer increased. If the jobber's margin is too small, then the manufacturer's and retailer's margins must be shrunk, or material and labor reduced, or price to the consumer increased. If the retailer's margin is too small, then the manufacturer's and jobber's margins must be shrunk, or material and labor reduced, or price to the consumer increased. Considering the price to the consumer, for purposes of comparison, as 100 per cent, the manufacturer cannot claim 65 per cent, the jobber 20 per cent and the retailer 40 per cent, and everybody get away with it. For these three percentages cannot be added so as to make 100 per cent. If the total is to remain unincreased, any one item in the addition can be increased only when another item is decreased a like amount, or the decrease split up among several items.

Thus, if one group claims a higher margin, it would seem to be under obligation first to make all possible and justifiable shrinkage of cost within its own field or to start doing it before it is justified in asking other groups to undertake studies within their own fields so as to permit the setting of higher margins for the petitioner. This is why one is justified in urging the contractors and dealers to pare their overhead to the lowest advisable figure, to increase their turnover, and to think in terms of invested capital.

For too long a time, perhaps, too much of the merchandising and economic thought of the country has been concentrated on the possibility of "eliminating" middle men. In all industries, and especially in the electrical industry, we can perhaps make faster progress just now, if we concentrate our efforts on lowering the

tributive functions and on eliminating waste therein rather than by concentrating on efforts to eliminate functions and middlemen. Not for a moment should we think of the existing machinery of distribution as fixed for all the years to come, not

> THE electrical industry through a joint commission of retailers and jobbers and manufacturers should make a thorough survey of methods and costs in the distribution of domestic electrical appliances, in order to discover where wastes in such distribution occur, what these wastes cost, what wastes can be prevented and how, and to provide a sound foundation of facts on which each manufacturer can determine what are fair margins for any and all distributing agencies between himself and his consumer.

that one method of distribution is desirable and expedient for all. Variations in present methods and changes from present methods are perhaps advisable and are sure to exist and come whether we want them or not, but it must be recognized that the present distributive machinery within the industry is trying to do a creditable job and should be paid for it. What is needed is better performance of the necessary productive and distributive functions.

Better performance in productive and distributive functions implies economic loss or waste in present performance. If such is the fact, it is only fair to hold that if the cost of waste can be saved and applied as needed increases in margins, then margins and prices probably can be adequate and fair. Margins may even be lower, and profits satisfactory, and prices to the consumer lower, if all possible waste is squeezed out of the entire economic process by improvement in methods of production and distribution. Does such waste exist in distribution? Excellent authority holds that it does.

Edward N. Hurley, former chair-United States Shipping Board, and in America.

also an electrical manufacturer, has repeatedly pointed out that America has not yet begun to make the progress in the elimination of waste in distribution that she has thus far made in the elimination of waste in production. Mr. Hurley has emphasized the phases of distribution on which surveys should be made in order to discover waste and to eliminate it by better methods, so that the costs of distribution and the price to the consumer should be lowered. These fields which Mr. Hurley says should be studied and on which cost data and method data should be obtained are included in Chart 3, which also indicates some of the causes of waste in natural resources and in human endeavortherefore waste in wealth.

If what Mr. Hurley, and others as well, say of American industry and commerce in general is true, and no one has denied it, is the electrical industry exempted from study by reason of better standing than the other industries? Not at all. On the other hand, in an industry which is as young as the electrical industry and in which there has been a rapid growth of a large crop of manufacturers, especially those of appliances and devices, and a fast increasing diversity and complexity of distributive methods, let us strive in every way to prevent waste in both production and distribution. Hence all the more reason for immediate studies of its own field by each group within the industry, or by a joint group. Is it too much to say that perhaps the whole difficulty over margins goes back to this waste in production and distribution?

Thus, as seen in a broad light, the question of margin is one that touches the fundamentals in production and distribution and one that involves a study of its relation to many elements.

To set fair margins on any product is no child's play, nor the work of a moment with a sharpened pencil or full pen. It is a task for a big brain, a task for the best thought on the best facts developed by close study on merchandising methods. It is not an easy task. It is a hard one. It is not an optional task and it is a necessary one, if the merchandising movement is to seize its opportunity, if the electrical industry as the servant industry of all is to eliminate economic waste, set fair margins and man of the Federal Trade Com- prices, and in so doing set a fast mission, former chairman of the pace in service for other industries





Electrical Merchandising Pictorial

A Monthly Picture Section of Sales Ideas

E VERY time your repairman or service man answers a call—even to fix a fuse or a doorbell—there is opened to him an opportunity to make profitable sales of wiring extensions, convenience outlets, handy switches, and labor-saving appliances. It's just a matter of—"Show the householder what her home needs, and ask her to buy!"

On this and the following pages, George H. Duffield, widely known among the electrical contractors of the country through his long connection with the National Electrical Contractors Association,—shows how, if he were a contractor-dealer, he would take advantage of a call to repair even a doorbell by going himself and selling the woman of the house on the idea of a complete electrical wiring installation.

For the past five years Mr. Duffield has been a member of the business staff of ELECTRICAL MERCHANDISING at New York. Prior to that time he was for seven years with the National contractor-dealers' association, serving the latter half of the period as national secretary of the body.



Every Service Call and Minor Repair Job Opens the Door for Profitable Wiring Sales—if You Will

Show Her What Her Home Needs, and—Ask Her to Buy!

A scenario of wiring sales, complete in seven selling scenes. See next page.



Suggest an Outlet at Convenient Height

HAVING been ushered into the house, Mr. A. Live Contractor (Mr. Duffield) glimpses from the hall the maid balancing herself on a chair to plug in the vacuum cleaner. "Excuse me, Mrs. Jones," suggests he, "but a convenience electric outlet like this, right there, will give you a convenient connection for your sweeper, and save furniture, glassware, trouble and temper."



Provide Through-Switches on Her Appliance Cords

THESE appliance cords festooned from the dining room fixture present a picture familiar in thousands of homes today. To the alert mind of Mr. A. L. Contractor, however, the situation suggests threefold opportunities: No. 1, put through-switches on the appliance cords and fit them with standard plugs; No. 2, install convenience outlets in the table, fed from a floor outlet; No. 3, better fixtures.



Electrical Merchandising Pictorial, March, 1922

A Light Over the Sink Will Eliminate Shadows

IN A KITCHEN fitted only with the usual center-light, there is a dense black shadow across the sink whenever anyone is working near it. Show the beneaving as Mr. the housewife, as Mr. Contractor is pictured doing, that a light over her sink and cutting-board, will take a lot of the eyestrain out of kitchen work. Suggest another light near the range. And a 200-watt industrial reflector watt industrial - reflector unit over the washing machine will make hers a "day-light" laundry. And while talking about the sink light, remind her how an electric dish washer would save her hands and her time Sugar hands and her time. Suggest an electric range—ashless, odorless, food-conserving. Tell her about the electric refrigerator, the electric kitchen unit, the electric ice-cream freezer,—she'll listen! Every Service Call and Minor Repair Job Opens the Door for Profitable Wiring Sales —if You Will

Show Her What Her Home Needs, and—Ask Her to Buy!

Continued from first page of Pictorial Section



A Safety Switch—and Fuses Easy to Replace'.

AFTER Mr. Contractor has pointed out the advantages of a bell-ringing transformer to keep that pesky bell always in order, he can take this opportunity to give some sound technical advice to the woman of the house—namely, that the present meager knife-switch and entry equipment be replaced with a safety inclosed switch and a safety panel with labelled fuses—all easy to get at.



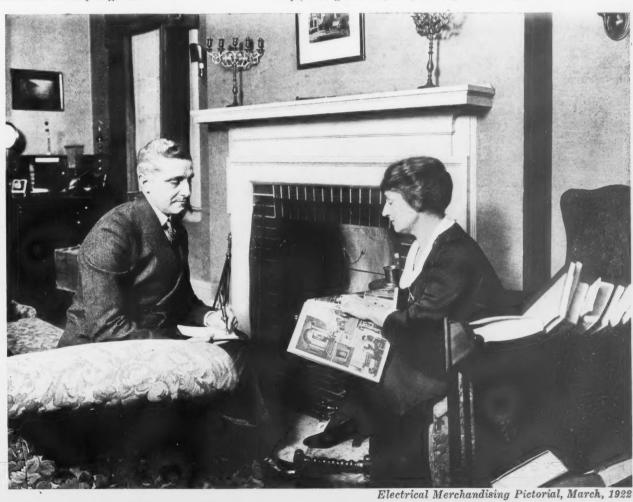
"When the Closet Door Is Opened, the Light Will Light"

IN THE upper rooms of the house, show how the closets can be equipped with door-jamb switches—"then when the door is opened, the light will come on." Have pull chains on such sockets so the closets can be opened for airing. While upstairs, suggest convenience outlets for milady's boudoir lamps, vibrator, heating pad, reading lamps, sewing machine, fans, hair dryer, violet-ray, etc.

Show Her Pictures and Plans of Adequately Wired Homes

THE contractor who goes prepared for real selling will have with him some attractive literature on "Electrical Homes," or several booklets on appliances and wiring conveniences. A number of excellent booklets on home equipment are issued by the manufacturers and by the various electrical associations, for distribution to the public. Or a copy of ELECTRICAL MERCHANDISING will serve the purpose, affording pictures and wiring plans of complete homes electric to point to.

Use the manufacturers' booklets, use the Society for Electrical Developments bulletins, use photographs of other examples of your own jobs—use anything that will "show her what her home needs," Then "Ask Her to Buy"—and take down the orders!



Utica's Home Electric Sets a New Record

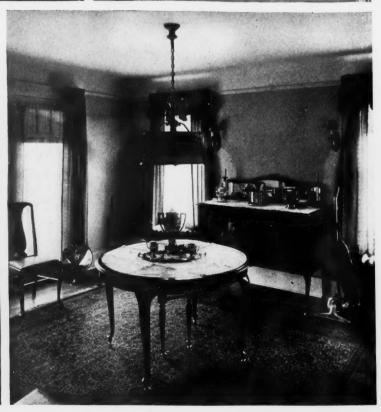
A THOUSAND visitors a day was the average attendance at the Home Electric opened in Utica, N. Y., in the first two weeks of December, under the auspices of the Utica Electrical Contractor-Dealers' Association and the local real estate interests. Altogether, no less than 15 per cent of the city's population inspected the home! The association attributes this record to four or five sound policies and methods underlying the campaign: Newspaper feature stories and advertising appeared daily. Numerous attention-getting stunts were tried, such as the use of arrows throughout the city pointing the direction to the home, and the distribution of maps showing all routes to the home. The house itself was floodlighted every night, and festoons of lights illuminated the streets leading to it. The Home Electric itself was also a House Beautiful, of unusual utica, the project owed its success to the fact that it gave people, at last, a chance to see something which they had long wanted to see!











Electrical Merchandising Pictorial, March, 1922

Tell the Business Girl,"Do It Electrically"



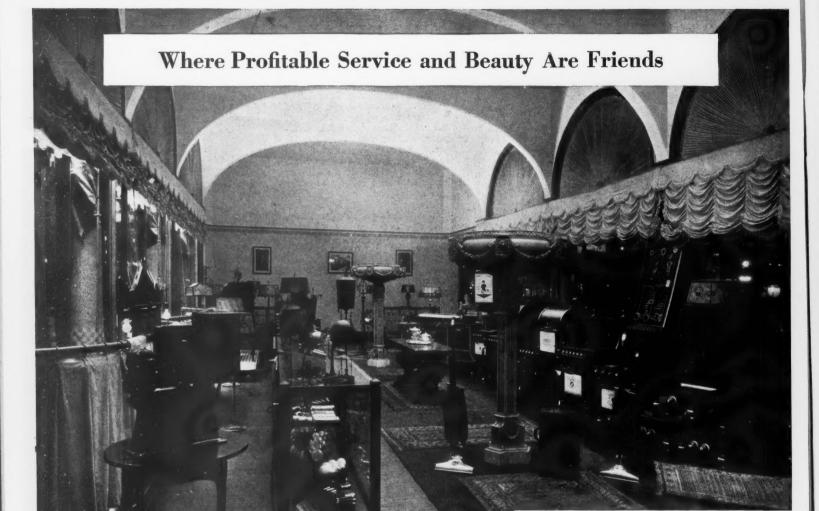
Says Clara Zillessen:

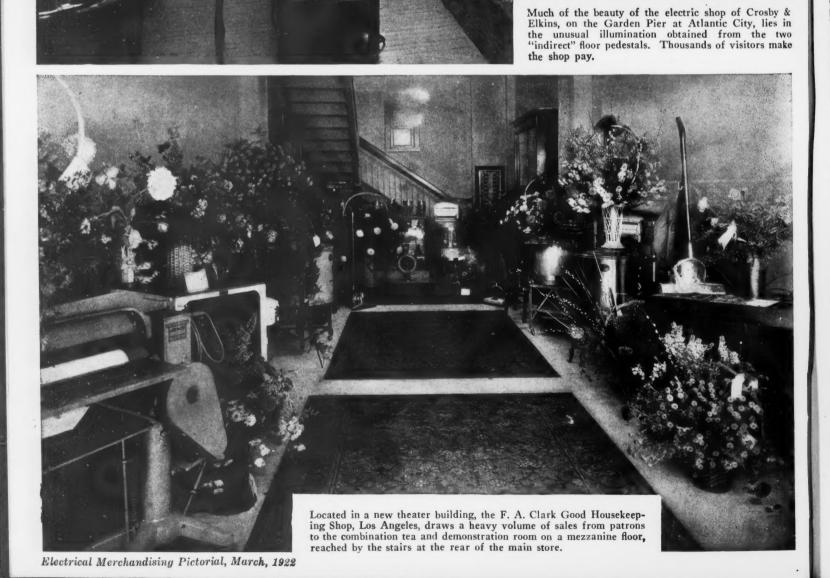
NE reason why Clara Zillessen can hold down the job of assistant advertising manager of the Philadelphia Electric Company, write electrical articles for women's magazines, and run a servantless home, all at the same time, is that electric service in her home is used wherever it can save time and labor for herself and the other half of her family—her mother. She's proving one thing, anyway—that a successful business women can enjoy the bliss of running her own home, too—if it's electrical. Miss Zillessen cooks, sews, cleans, washes and irons electrically. And if you, having had the good fortune to be one of her dinner guests, should wonder how, after a long day in the office, she can be the charming, unruffled hostess that she is, she will proudly lead you around and introduce you to her staff of electric servants. "If it isn't electric, it isn't modern," is more than a slogan—it's a creed—with her!



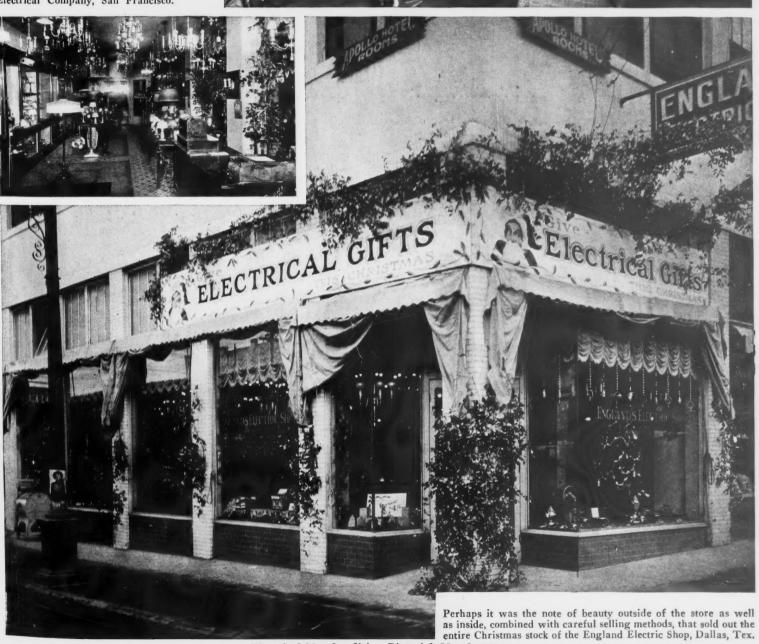


Electrical Merchandising Pictorial, March, 1922









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Electrical Merchandising Pictorial, March, 1922



Presenting the Aristocracy of Fixturedom

Before or After Sunset

A Williamson Fixture Is a Thing of Beauty

Inquire of Your Jobber

R. WILLIAMSON & CO.



224 Fifth Ave. New York Washington and Jefferson Chicago 711 Mission St. San Francisco

HIGH-LIGHTS Of the WILLIAMSON PLAN

Presenting the Aristocracy of Fixturedom

Superiority of Finish

Correctness of Design

Consistently Priced

Inquire of Your Jobber

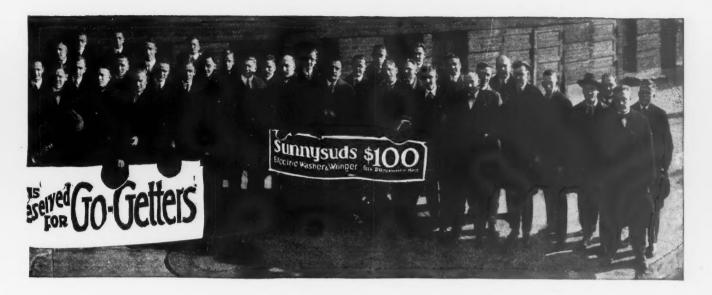
R. WILLIAMSON & CO.



224 Fifth Ave. New York Washington and Jefferson Chicago 711 Mission St. San Francisco



The Bailey Co	Cleveland, O.	125	Neumann Bros	Galion, O. 12
Home Wiring & Chand. Co	Youngstown, O.	125	E. H. Hossler	Bloomville, O. 6
Dauntless Plbg. & Elec. Co	Akron, Ohio	250	Bucyrus United Elec. Co	Bucyrus, O. 6
Columbus Ry. Light and Power Co.	Columbus, O.	125	R. C. Douglas	Buckhannon, W. Va. 3
Richland Pub. Serv. Co	Mansfield, O.	250	C. W. Beckley	Warren, Pa. 1
Welch Appliance Co	Steubenville, O.	250	Valentine & Reed	Lancaster, O. 6
The United Elec. Co	Marion, O.	125	Jones-Branson Hdwe. Co	Lima, O. 3
Moeglings Light House Co	Canton, O.	150	Exide Battery & Elec. Co	Orrville, O. 6
Koehler Hdwe. Co	Reading, O.	12	Huber Builders Material Co	Cincinnati, O. 75
Moore & Pero Elec. Co	Fremont, O.	50	W. L. File	Mt. Victory, O. 3
I. C. Porter Hdwe. Co	Findlay, O.	50	Jansen Hdwe. Co ,	Covington, Ky. 1
B. F. Donley Eng. Co	Ashland, O.	50	Crum & Crum , .	Greenwich, O. 2
Haverland Elec. Co	Hamilton, O.	25	Citizens Elec. Co	Shalby, O. 1
Home Elec. Appliance Co	Zainesville,O.	25	The Herbert Furn. Co	Cincinnati, O. 12
Richards Elec. Co	Bellevue, O.	15	Twin City Elec. Co	Uhrichsville, O. 125
Warren Armature Works	Warren, O.	12	United Elec. Co	Marion, O. 125
Scott Elec. Co	Greensberg, Pa.	12	Mitchell Electric Co	Willard, O3
Hoffman Elec. Co	Newport, Ky.	12	TOT	AL 2053



"I Saw Them Buy 2053 Sunnysuds Washers in 20 Minutes!"

During the evening of January 12th I experienced my greatest thrill since my association with the household appliance industry. Around a banquet table laid in our assembly room were gathered almost 100 Sunnysuds dealers, all of them associated with the Ohio Electric Sales Co., Sunnysuds representatives located at Mansfield, Ohio.

The afternoon had been spent in inspecting the plant and manufacturing process and in the discussion of sales and advertising plans. Enthusiasm ran high and at the banquet it mounted even higher. After the last course had been served, Mr. Wm. Switzer, Sales Manager of the Ohio Electric Sales Company, announced that several dealers had evidenced a desire to place orders for immediate delivery. He proceeded by suggesting that a few minutes be set aside for the purpose of allowing others to do likewise.

A blackboard was set up and in a wildfire of enthusiasm Sunnysuds dealers from every

important city, town, and hamlet in the Ohio territory began shouting their orders. They came in faster than Mr. Switzer could write. And at the end of 20 minutes a grand total of 2053 Sunnysuds washers had been ordered for immediate delivery! It was an inspiring 20 minutes. And I feel it was a tribute to the Sunnysuds more striking and more convincing than anything I or anyone else could say, for it proved that the Sunnysuds has not only definitely established itself in the mind of the public, but that it is one washer which can be sold at a continuous profit.

(Signed)

A.C. Sebulske L.

President and General Manager

SUNNY LINE APPLIANCES, Inc., Detroit, Michigan

Canadian Factory: Kitchener, Ontario

(24)

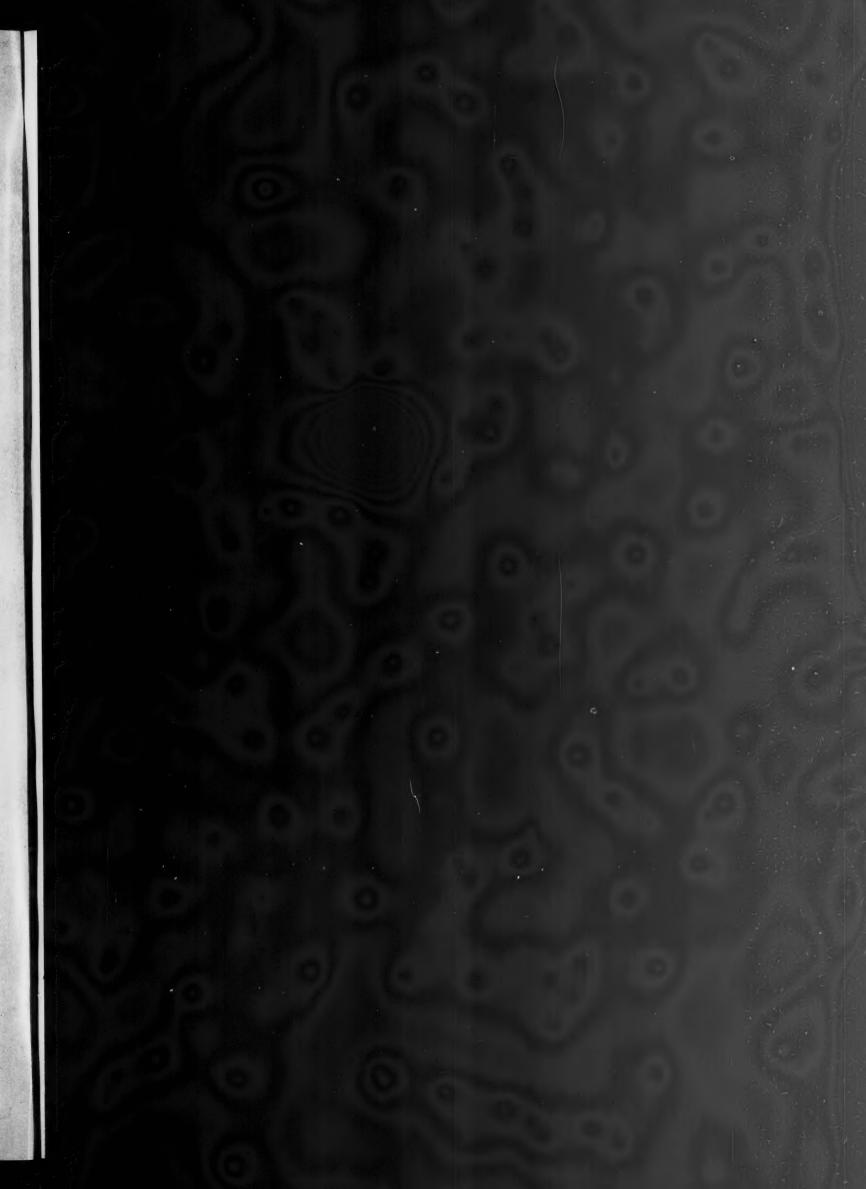




"Westinghouse's conception of the place in the affairs of man of central power systems became great when he realized the possibilities of the use of alternating current. That realization was an inspiration of genius. It did not come overnight; it had a background of thought and experience, and we are told that genius is a manifestation of the capacity to 'toil terribly.'

"Early he developed the idea of converting energy into useful power, on a large scale, at suitable places, carrying it to greater or less distances, and distributing it for the 'use and convenience of man.' Westinghouse more than any other one man opened up the way for cheap transmission of power—this by the use of the alternating current."

-Photo copyright by Gessford, 1904





George Westinghouse— Indefatigable Builder

E HAD dignity which protected him from familiarity, but he was simple, unaffected, and instinctively cordial in his manner like to call democratic, what we but might better call aristocratic. His manners and his language were exactly the same with princes and with machinists and with his old negro butler, which seems to be the height of good breeding. He respected the workman and the prince, the justice of the Supreme Court and his butler, just as he respected himself, and on that basis rested his intercourse with his fellow men. Along with this basic self-respect and respect for others went a natural kindness. It hurt him to hurt the feelings of another. This was the foundation of his unfailing courtesy.

In the few hours of ease which he gave himself in a life of prodigious toil, he was a charming companion, genial, courteous, and sympathetic. Unfortunately for his friends, and unfortunately for the world, he did not give himself enough hours of ease. His life long, Westinghouse was temperate in everything but work.

A Life Spent in Restless, Gigantic Toil

Westinghouse did not work for Money to him was merely stored energy, to be used to extend industry and to do good. He recognized the duty of producing proper returns to those who invested in his enterprises, but his own dividends were constantly reinvested in the further development of those enterprises. He might have retired in middle life a comfortably rich man, but he chose to spend his life in gigantic toil. He enjoyed power; but that was only an incident in his career, not an end. Like all noble minds, he enjoyed the approbation of the discriminating, and he was always solicitous that no reproach should attach to the name Westinghouse; but he did not work for glory. He had honorary degrees, but no one ever heard him called doctor; he had decorations, but no one ever knew it from him, and his medals were not displayed in his houses.

One underlying motive actuating his life was perhaps best expressed to an intimate friend while subject to the solemn influence of a walk through Arlington Cemetery, where now his body rests beside that of Mrs. Westinghouse. The friend, solicitous as to the health of Westinghouse, urged him to rest from the work which threatened to break down even his robust constitution, adding that he had already accomplished

vastly more than other men and possessed all the wealth that he could require. In a thoughtful manner Westinghouse replied: "No, I do not feel that it would be right for me to stop now; I feel that I have been given certain powers to create and develop enter-

On March 12, 1914, just eight years ago this month, the tireless frame of George Westinghouse was laid to rest, after a richly useful life of 68 years. For its series of biographical sketches of men of vision and energy who have built the electrical industry along broad lines, "Electrical Merchandising" has extracted these paragraphs outlining the inspiring personal character and virtues of Westinghouse from the new authoritative biography, "A Life of George Westinghouse" by Colonel Henry G. Prout, just published by Charles Scribner's Sons, New York City, for the American Society of Mechanical Engineers, under the direction of a committee consisting of Charles A. Terry, Paul D. Cravath, Alexander C. Humphreys, James H. McGraw, Charles F. Scott, L. B. Stillwell and Ambrose Swasey.

prises in which other men can find useful and profitable employment, and so long as I am able, it is my duty to continue to exercise those powers." The great spirit within him could tolerate no ease, but drove him forward remorselessly.

Westinghouse was probably the first man of strong influence in electric development to realize the importance of adopting and adhering to a standard frequency of alternations. Very early he pointed out to the staff at Pittsburgh that a standard frequency was important in the same sense that a standard railroad gage is important. The frequency, 60 cycles, which was first adopted by the Westinghouse company as a result of Westinghouse's foresight, is today the standard frequency generally in use in the United States.

Perhaps his most important faculty was imagination. This was of the creative rank, like that of the empire builders, like Clive and Cecil Rhodes.

Next in rank we may put fortitude, which is courage in adversity, and which is one of the noblest attributes of man. There were black moments in the life of Westinghouse. There were times when his bravest associates thought that his enterprises must go on the rocks; but his serene courage was never dismayed. In his saddest reverses, the splendid spirit flamed on, unquenched.

Closely allied with fortitude is audacity, a quality less noble, but useful in execution.

His audacity was Nelsonian. H

would have "Copenhagened" the Danish fleet, or would have engaged the French fleet at the battle of the Nile, just as gaily as Nelson did—and, in the Nelson philosophy, "the boldest means are the safest."

In a certain eleven years, Westinghouse took out 134 patents, started six important companies which still exist. took the air brake through its one great crisis, and, most important of all, started the alternating-current revolution in industrial history. How could mortal man do so much? We have told of his strong body and perfect health, of his powerful mind which worked swiftly, and without heat or friction, and his imagination, persistence, and But his gift of concentration energy. has not been mentioned. He could close his mind suddenly and completely. He took a subject into a water-tight compartment, and there he and the subject were alone five minutes or five hours, until he was ready for another sub-He could handle simultaneously and without waste of energy a dozen companies in two hemispheres.

Energy, Audacity, Tenacity, and Fortitude!

Westinghouse attacked with energy and audacity, and he held on with tenacity and fortitude, and he was completely self-reliant. People who did not know him very well are apt to think of him as imperious and self-sufficient. Nothing could be further from the fact.

He was self-reliant, not self-sufficient. Westinghouse sought freely and respectfully the opinion of those about him. He put that opinion through the mill of his mind, and made his own decisions. He had one of the attributes of genius-the capacity to withdraw into the loneliness of his own soul, and there to conceive and meditate, and then to act. After all, can really great things be done in any other way? Whether the result is good or bad must depend on the qualities of the soul. He had this attribute of genius and many others. It is easy to say that a man is a genius. The term is so vague that it fits almost any large and unusual combination of endowments. We have tried to show that Westinghouse was a good deal more than a genius. was a man of balanced character, which a genius may or may not be. He had high and simple standards to which he was consistent. He was strong and he was gentle. He was acute and he was sincere. Carnegie was quite safe in saying that he was a genius and Kelvin was quite right in saying he was great in character.

Volsteading Electricity

Is Prohibition as Applied to Electrical Construction Leading Us to Excessive Home-Brew Wiring?

By FRANK B. RAE, Jr.

A SWEDE who chews tobacco decided that what somebody else drank gave him remorse. The results of this weird cerebration have been various, chief of which is that America has learned the art of home brewing and the autumnal production of vinic beverages.

That is America's way.

Nobody can verboten us and get very far with it. If we think a thing is all right we do it—rules, regulations and prohibitions to the contrary notwithstanding. If we can't do it openly without running foul of an enforcement authority, we do it privately, regardless of risk, and often with no better excuse than the personal satisfaction of proving that prohibition does not prohibit.

This truth applies to the use of electricity just as surely as it applies to beverages containing more than one-half of 1 per cent. So many prohibitions have been issued on the subject of electric wiring that the public is becoming annoyed. A man wants an extra outlet; he calls upon a wireman and receives a quotation which fairly staggers him; his inquiry reveals that the high cost is incurred because material of weight and stability suitable for a battleship must be used under the regulations; "T'ell with regulations," says he, and runs a home-brew circuit of bell wire.

"Nobody Can Verboten Us and Get Very Far With It"

Wrong? Of course it's wrong! But also it is United States human nature. Such prohibitions outrage American common sense, affront American self-respect, and are contrary to that clause in The Unanimous Declaration of the Thirteen United States of America which says that "all men are endowed by their Creator with certain inalienable rights," among which Old John Public sees no reason why he should not include the right to string wire when, where and as he jolly well

pleases. He'll risk a fire—just as the home-brewer takes a risk on his fire-water. The result may be fatal; no matter—he has never died yet and this does not look like his day for dying. Anyway, he'll show these prohibition lawmakers that they can't compel him to spend \$14 for a 50 cent job, just because they've a code of regulations designed to make themselves rich—and much more partly-wrong, partly-right sophism in similar vein.

Now, I arise to suggest, Mr. Chairman, that we electrical dealers and salesmen view this matter from some other angle than that of a Philadelphia lawyer. I suggest that we view it from some other angle than that of the engineer who frames the regulations. I suggest that we view this problem as business men, as salesmen, as men who, in the last analysis, must sell the Code to Old John Robinson Public.

Code Contradictions and Incongruities

In the electrical business, prohibition is directed toward making electricity safe-in theory. No one can quarrel with this laudable purpose. The incongruity of open knifeswitches and porcelain sockets is entirely beside the point, since it is better to be fifty per cent safe than one hundred per cent in jeopardy. Nor do we permit ourselves to smile at wires codefully run through conduit and terminating in a red-hot flatiron which somebody has forgotten to turn off. Undoubtedly it is better to blame the resultant fire upon a bohunk servant than upon "crossed electric light mythical wires." We, like the Code-writers, are for safety first, last and forever. in theory and in practice-Amen!

But we make bold to question whether safety can be secured through prohibition. We don't believe it can. In fact, we know it can't. Prohibition, we now know by experience, leads only to law-break-

ing. Control, we are convinced, is a matter of salesmanship and sweet reasoning.

The first concern of the salesman, we are told in our correspondence courses, is The Goods; hence I urge electrical salesmen to get hep to the code. It is a fearful and wonderful document, patterned apparently after Joseph's coat, of an intricacy and luridness to amaze a camel. But we need not start a discussion of the Code. Like the Constitution of the United States, it is a fine and lofty document, meriting all reverence from the like of us. If, like the Constitution, it has been tinkered to its detriment, we may breathe an anathema against the tinkers without disrespect to the tinkered.

"Sell the Code to the Public" as a Protection and Convenience

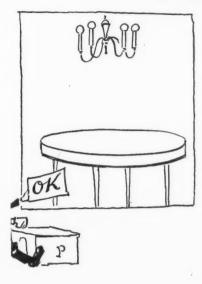
Such as it is, read it—study it—learn it.

Then do two things: Sell it to the public, and raise Gehenna to have it improved.

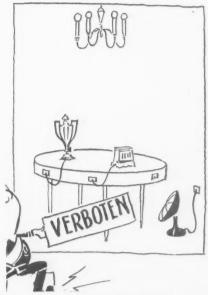
When I say, "sell it to the public," I mean that its purpose and necessity and power for good should be made plain to every householder who uses electricity. Not as a prohibition law—not on a "thou shalt not" basis—but as a regulatory document designed for the protection and ultimately the convenience of Mr. John Ordinary Public, to make his installation ship-shape, safe and permanent, instead of sloppy, dangerous and temporary. It can be sold on that basis, and must be.

And when I say, "raise hades to have the code improved," I mean just that. The code has been evolved and developed solely by engineers. These engineers have not been concerned with the commercial effect of their prohibitions; like the tobaccochewing Volstead, they have striven to overcome others' bad habits to the neglect of their own. They have assumed that there is only one possible point of view.

Illustrating, as Sometimes Happens, That When You Do the Job Right, You May Yet be All Wrong—According to the Code







Here is a room with four ceiling outlets. According to the Code three such rooms, each with four outlets, can be supplied from a single circuit. This installation is approved by the National Electrical Code and by the inspectors who inspect under the Code.

Comes now Friend User with his shining new electrical appliances and, climbing on a chair, plugs in his percolator, toaster and radiator. Then we have the situation shown above, to which again the inspectors grant their approval under the Code.

But suppose Friend User learning of the delights of "convenience outlets" decides he will have outlets installed to operate the same appliances more handily, and orders one outlet in the floor, four in the sidewalls, —making nine outlets in all in each room.

Same rooms, same appliances, same user, same use—but the installation shown in the third sketch is not approved by the Code because five convenience outlets have been added in each room, making a total of twenty-seven outlets on the circuit and the total nominal load on the circuit far exceeds 660 watts.

The Code, however, would in practice allow the householder

The Code, however, would in practice allow the householder to seal up these convenience outlets and go back to No. 2.

And it is for us to set them right. The worst menace of the future of the electrical trade is homebrew wiring. Nowadays, when every schoolboy knows the theory of circuits and has learned that he can handle one hundred and ten volts with impunity, when all sorts of wiring material and devices are sold in the corner drug store and the "five-and-ten," every home harbors its electrician.

The Public Has Been Thou-Shalt-Not'ed to the Point of Flouting Authority

Prohibition is not going to control the home-brew wireman, any more than Volstead's fearsome document can prevent the decoction of home-brewed booze. On the contrary, the excesses of prohibition are the very basis of the trouble. The public has been thou-shalt-not'ed to the point of flouting authority, busting the law maliciously, and carrying illicit practices beyond the bounds of common sense. Adding new prohibitions is like adding gasoline to a burning match. Also, the detonation may lift the prohibitor to a higher sphere.

No, it will not be by making proand benefit of portable electric her hibition stricter that this problem And not infrequently sales result.

will be settled, but by making prohibition reasonable, logical and equitable, and making the public understand it as such. One trouble now is that too many people think the code is either a money-making scheme of the contractors, or else plain foolishness. Another trouble is that the code makes extravagance mandatory and is full of indefensible inconsistencies. The solution of the problem lies in making the code a saleable document, and then selling it to the public.

But neither compulsion nor salesmanship will ever make America accept anything that begins, "Verboten."

Selling Thermometers Locates Electric Heater Prospects

One way to locate prospects for electric heaters, an electric dealer in the apartment house district finds, is to sell thermometers. By advertising the temperature indicators, he brings into his store dozens of people who have good reason for wanting to check up on the warmth—or absence of warmth—in their apartments, in order to make definite and pertinent statements to their landlords.

Having committed themselves as sufferers from the cold, they open the way for tactful salesmanship on the comfort and benefit of portable electric heaters. And not infrequently sales result

Let Your Neighbors Know What You Sell!

There's a town in Pennsylvania where there's an electric shop. And over the electric shop there is an apartment. Not so long ago a house-to-house campaign was organized to sell electrical appliances in the town. When the salesmen came to the apartment over the electric shop one of them said:

"What's the use of calling on a housewife who lives over a complete store of everything electrical?"

"Let's give her a ring anyway," insisted his side partner. "House-to-house means selling everybody with a wired home." Five minutes later they had sold the apartment dweller an electric iron and a toaster stove.

"This is fine, Madam," smiled the salesman, "but why didn't you buy them from your neighbor downstairs?"

"Why," said the newest customer, "I didn't know he sold 'em!"

Moral: Don't take the public for granted. Arrange your counters and windows and aisles so that people can't go by your place without finding out that you sell electrical goods!

-As Our Next Number on the Program, Ladies,

An Electrified Kitchen Cabinet!



No housewife is going to get the full benefit ing a new luxury for the housewife. It of her electrical kitchen appliances if she has to fuss with inconvenient connections every time she uses them. Wiring the will continue in favor with her or be diskitchen cabinet isn't a question of provid-

F THE kitchen is the heart of the home, the kitchen cabinet is the heart of the kitchen. Grown mightily in the favor of the housewife, it is still, however, only in process of development. Every month sees the announcement of some new "improvement." It is constantly being added to or subtracted from-a new drawer added here, a new laborsaving device there - heightened, shortened, narrowed, broadened, enlarged, en-smalled.

So it's about time for the electrical branch of the family to get in a word on the possibilities of an electrified kitchen cabinet.

As a matter of fact, an electrified kitchen cabinet in one form or another will eventually be a necessity in every home that is progressive enough to have all or most of the electrical labor-savers. Suppose there are an electric dough mixer, coffee grinder, buffing machine, grinder, cream whip, egg beater and ice cream freezer in the kitchen. The orderly housekeeper will want a place to keep every one of these, and yet that place must be easily accessible so that with little more than reaching out her hand she can set the device to work.

Any Kitchen Cabinet Can Be **Equipped**

Now, the kitchen cabinet is essentially an assembling plant for all the tools in hourly use by the housekeeper. It is therefore the logical storage place for the electrical laborsavers that she has invested in.

Some day the cabinet manufacturer will take this need into account; in the meantime, every electrical contractor-dealer can hasten that day by telling the story to the housekeepers in his community, and perhaps by wiring a kitchen cabinet himself and displaying it in his store.

Even if the housewife has only one electric kitchen unit-the kind that has various attachments for beating, mixing, chopping, and so on-the logical place for this is on her work table and in her storage place, the kitchen cabinet. An allround labor-saving device like this is used anywhere from three to twenty times a day—to grind coffee, to beat eggs, to whip cream, to mix dough, to slice potatoes, to chop meat, to make mayonnaise. It's the kind of thing that makes a real housekeeper fairly chortle when she first uses it-until she has had to reach for an inconvenient receptacle a few dozen times, to start and stop her new labor-saver. A device like this loses half its usefulness when lack of a convenient outlet makes it hard to use, for the housewife will unconsciously avoid the tiresome repetition of that little motion and tend back to her hand tools.

No, electric kitchen devices like this should be-and will have to, if they are to keep the housewife's favor - permanently connected, in most instances by means of the wired kitchen cabinet; or, at least, will have to be made much easier to use by the provision of convenient receptacles in the cabinet.

Then they will be ready for instant use at a turn of the switch. In fact, that is the very ideal that should be held up for the use of every electric kitchen device, and it would, perhaps, be well worth the electrical dealer's while, every time he sells a kitchen appliance, to inquire about the conditions under which it will be used. A little talk with the purchaser might bring an order for the permanent wiring of her kitchen cabinet-if not immediately, perhaps a few weeks later, when she has proved the need of it to herself!

For this, at least, is certain: In the rush of preparing an elaborate dinner, no housewife wants to stop to connect and disconnect each device as she uses it. If she does, she will eventually wonder whether the fuss is worth the candle, and just where the labor-saving comes in!

And the electric kitchen cabinet need not be a cabinet de luxe, either. Any cabinet can be wired. But it's the kind of thing the housewife will long for, once she knows about itand eventually have. It's the kind of thing she would lead her friends to with more pride, actually, than to the new baby grand in the living room.

A "House Organ" for Your Customers

Maintaining contact with one's customers through circulars and envelope stuffers is all very well in its way, but not so personal or so effective as a regular "house organ" of one's own, thinks J. Franklin Miller of the Good Housefurnishing Store, Philadelphia. This company has recently inaugurated the practice of sending out a chatty two-page leaflet once a month to its customers, filled with helpful household hints and news of the store. For example, a recent issue was devoted to electrical table appliances as Christmas gifts and contained such articles as "A Step-Saving Kitchen."

And because the leaflet, as Mr. Miller expresses it, is "to render a helpful store service in addition to selling the newest appliances in housefurnishings," it is read with real interest by the housewives to whom it is sent.

With a Power Rate of 3½ to 2 Cents, Mr. Gute Finds Economical

House Heating by Electricity

The Gute "Home Electrical," near San Francisco, Is Heated Entirely by Electrical Energy, Electric Heaters of 2,000 to 6,000 Watts Rating Being Provided for Each Room—The Wiring of This Dwelling Includes 175 Outlets, Sixty Separate Circuits and 2\frac{1}{4} Miles of Wire

By LOIS CODD

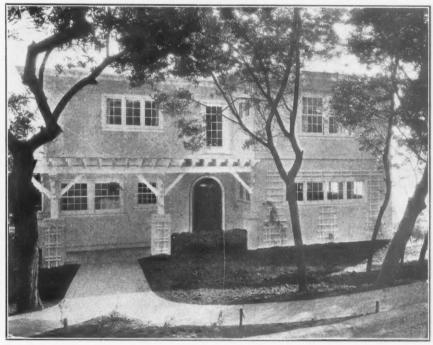
T APPEARS that local "Electrical Home" campaigns must be bearing fruit when we discover the newly constructed home of a layman in California which can boast of more than 175 outlets, sixty complete wiring circuits and 24 miles of wire.

During the past year some seven demonstration Electrical Homes have been built at various Western centers for the purpose of telling the public what the words "convenience outlet" mean and of showing thousands of prospective builders that where the word "home" is concerned "modern" means "electrical." The fruits of this publicity are seen in the increasing number of convenience outlets with which hundreds of California homes are being equipped.

Situated high up on the Berkeley Hills, near San Francisco, the home of H. J. Gute is truly the fulfillment of the electrical home ideal. It offers dozens of suggestions as to how the home can be made more ingeniously electrical than any of us have heretofore dreamed. In fact Mr. Gute experienced his principal difficulty in convincing his architect and contractor that from two to six convenience outlets for each room were none too many and that a 20-amp. outlet fed by a No. 10 gage wire was nothing surprising for each room's electric heater, making one wonder whether those who wire and plan do not need electrical home propaganda even more than does the home building public.

Heated Entirely by Electricity

Perhaps the most distinctive feature of the Gute home is the fact that it is entirely heated by electricity. In each room there is a special convenience outlet on its own 220-volt circuit to which a Wesix electric heater can be attached. This heater is a San Francisco product.



"The home without a chimney"—The Gute "Home Electric" at Berkeley, Cal. In fact, by installing electric heating and electric fire places the cost of a \$1,200 chimney and mantel was saved and the money put into additional electrical equipment. The yard

surrounding the Gute home is like a mooniryland at night because of the lamps under the eaves. Note, beence of wires because of the u ground cable for service entry and garage line.

A hollow core of fireclay wound with nickel-chromium coils comprises the heated area over which the air circulates. A sheet of plinished copper behind the cores makes the operaconvection and radiant types.

Each core consumes 1,000 watts. In the Gute home the smaller rooms are quickly and economically heated by a 2,000-watt heater, while a 5,000watt heater is used in the library and one of 6,000 watts rating has been modeled into an electric fire-

It is estimated that the cost of a chimney and mantel which would match the rest of the Gute home would be at least \$1,200, but the entire outlay for this electric fireplace did not exceed \$160. The fireplace is provided with a three-heat

switch so that the temperature of the room can first be raised to the desired point by all the coils, and then maintained there by two coils, which, under the power rate, contion of these heaters of both the sume only 4 cents worth of energy per hour. Beyond this economy there is also the advantage that no heat is lost up a chimney, and further there is the absence of all dirt or smudge in the house, annoyances inevitable when gas, wood or coal are used.

> A 6,000-watt electric water heater keeps the house hot-water supply tank always full. This heater is designed in much the same way as the air heater, but with the water passing through the center of the cores automatic temperature control is provided by a rugged thermostat.

One realizes that the day of elec-

tric heating is actually here when one sees this demonstration of a tenroom home entirely heated by electricity with a power and light bill which never exceed \$20 per month and with an owner who declares that the initial cost of installing electric heaters and the proper convenience outlets is less than the cost of chimneys and stoves.

Outlets and Appliances

In every room of this house there are from two to six regular 110-volt convenience outlets in the baseboard and all of these are in practically constant use. Every kind of appliance from the electric curling iron to the electric phonograph or cigar lighter can be attached, each at the most convenient point.

The kitchen, spotlessly white because it has never known any but an electric stove, is a joy to behold with its electric dishwasher, electric refrigerator, electric range and utility motor for beating eggs, polishing silver, etc. The flatiron is of especial interest because of an automatic control by which the cord "flips out" when the iron become heated over 575 deg.

The exterior lighting of the home is an also rather novel new thought. At each of the four corners of this home, on the eaves, is a 300-watt These lamps light the entire yard, making it a spot of unusual beauty and protecting the house as well as a burglar alarm system. When the lights are turned off in the house the moonlight effect obtained from the exterior lighting is more restful than the softest lamp.

It is evident from a brief review of this home that members of the ELECTRIC LIGHTING, POWER, AND HEATING CIRCUITS AND EQUIPMENT OF H. J. GUTE'S "HOME ELECTRIC," BERKELEY, CAL.

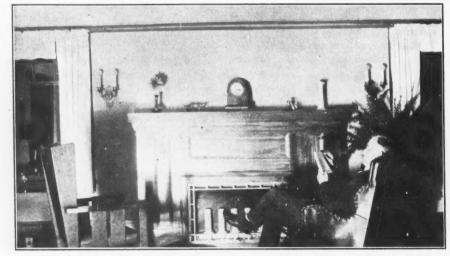
Room	On Lighting Meter. Rate7c. per kwhr. Lights—110 volts	On Power Meter Rate: 3½ and 2 cents per kwhr.	
		Convenience Outlets—110 volts	Heater Circuit— 220 volts
Living Room		Floor plug-center: table lamp Five base plugs for: portable lamps, vacuum cleaner, etc. Electric clock regulated from Western Union wires	Heater—6,000 watt 20-amp. outlet: Fire- place fed by No. 10 gage wire.
Music room	(2) Four side brackets	Base plugs for: electric plano, piano lamp, electric phonograph, portable lamp or automatic electric violin	6,000-watt heater
Library	(3) Four side brackets	Floor plug-center: library lamp, base plugs for portable lamps, cigar lighter, etc.	
Dining room	(4) Four side brackets Candelabra fix. fr. ceil.	Floor plug, No. 10 gage wire for quad- raceptacle: coffee urn; grill; chafing dish; tea-kettle; toaster	6,000-watt heater.
Breakfast room	(5) Ceiling light	Floor plug, No. 10 gage wire for quad- raceptacle; percolator; waffle iron grill; toaster	
Kitchen	(5) Two side lights and ceiling	Base plug-dishwasher, wall outlets for iron, general-utility motor, beater electric silverware cleaner, etc., re- frigerator	Electric range on spe-
4 bedrooms	Four side brackets in each	Two base plugs in each for warming pads, hair dryers, curling irons portable floor lamps	
Sewing room	Four side brackets	Base plugs for sewing machine, floor lamp, iron, etc.	20-amp. outlet fed by 10 gage wire for 2,000-watt heater
Bathroom	Ceiling light	Base plugs for immersion heater, curling iron	20-amp. outlet fed by 10 gage wire for 2,000-watt heater.
Laundry	Ceiling light	Base plugs for washing machine ironer, clothes dryer, iron	6,000-watt water heater for house, hotwater supply
Billiard room	Two side brackets and long overhead fixture specially designed for billiard table		n
Printing pressroom	Ceiling light	Outlet to which ½-hp. motor is attached for operating printing press.	1-
Garage	Side and ceiling lights	Base plug for air pump, storage battery charges.	e-

electrical industry as well as home builders are just beginning to realize the possibilities of electricity in the The electrical contractor is home. the man to whom the home builder looks for suggestions and help. If, taking into account the local electricity rate, he suggests that each room be equipped with three con-

venience outlets, that a 20-amp. outlet in each room will make economic electric heating possible (at a power rate of 3½ and 2 cents per kilowatthour) and that no dining or breakfast room is complete without a quadreceptacle, then the home builder will at least investigate the wisdom of the suggestions and a complete electrical home such as the one here described will very likely result.

One Month's Free Electricity for New Customers

The Nashville Railway & Light Company from Oct. 17 to Nov. 12 made a special offer of thirty days' electricity free to new customers, in this way offering to wire the home, allow twelve months to pay and furnish electricity absolutely free for the first thirty days. This offer encouraged, of course, the liberal use of vacuum cleaners, washing machines, heating pads, sewing-machine motors, percolator service and electric light. For a five-room house \$4.95 cash and a monthly stipulated payment brought the service.



A 6-kw. Wesix electric heater has been of this electric grate is contrasted with the modeled into this beautiful fireplace. A \$1,200 cost of a corresponding mantel and three heat switch makes temperature concludes the heat switch makes temperature concludes. H. J. Gute, the owner is enjoytrol a simple matter. The \$160 first cost ing a book before the glowing colls.

A One-Man Home Electric

How a New England Contractor-Dealer Put on a Demonstration Home of His Own and Entertained 6,000 Visitors in Eight Days





OHN A. DALEY of Lawrence, Mass., wanted to start a demonstration Home Electric in his town last year. He thought it an excellent scheme for getting his fellow citizens acquainted with electrical conveniences in a home setting. But either the other contractor-dealers couldn't see it or they moved too slowly. Whatever the reason was, John Daley wanted to have a Home in Lawrence, and he didn't see any other way to do it. So he ran one himself.

Yes, he had a complete Home Electric on exhibition for eight days, from Dec. 11 to Dec. 18. In that time he entertained 6,000 visitors, "and the results are showing yet in sales at our electric shop," he writes.

The house he procured was a modest frame affair of nine rooms. He told the owner about his plan and obtained permission, for a small payment, to use the home for eight days. Painters, plumbers, carpenters were all called in, the house was furnished complete by a local furniture dealer; bedspreads, table covers, dresser scarfs and pillows were provided by a needlework shop; all of whom received credit on neat cards placed throughout the house. Total expenditures came to \$800-\$300 for wiring and underground, \$500 for advertising, labor and other expenses. The advertising consisted merely of newspaper announcements and a large sign, "The House Electrical," in front of the house.

When the doors were finally thrown open, the crowds came in such numbers that they had to be taken through the rooms in groups of twelve. A demonstrator stationed in each room gave short talks on wiring, convenience outlets and the appliances. Absolutely no attempt was made to sell anybody anything.

Mr. Daley is more than pleased with the results of his one-man Home Electric. He's planning, now, another for the summer and a third for next fall!





The Public Is

Clamoring for Radio Sets!

"Wireless Telephone" Outfit Now an Essential Part of Any Home Electric-Package Idea Has Caused Radio Sales to Advance Rapidly—Broadcasting Stations Working Up Enormous Demand

By RAYMOND FRANCIS YATES

Member Institute of Radio Engineers

when the organ reigned suentertainment. How Pa and Ma used to swell with pride when Sister limitations. Katie managed to nurse a few squeaks out of it that could scarcely be identified as the "Star Spangled Banner" or "Abide With Me." The piano came and pushed the organ public regarded radio telephony as almost to extinction. Then the phonograph was introduced. Its scratchy vaporings still ring in our ears and its beautiful (?) morning-glory horn lingers in our memory. After the phonograph had firmly established itself, the home moving-picture projector made its début. But now the radiophone bids fair to outstride them all.

The radiophone receiver owes no and is, taking its place beside the phonograph, but it does not need to

ANY of us can remember fight for this place. It brings into preme as an instrument of only entertainment, but education and news. The phonograph has its

Radio Telephone as Easy to Operate as a Phonograph

Little more than a year ago the a great mystery. When the subject was mentioned, there flashed up in the mind's eye pictures of coils, meters, switches and the like. Who at that time would have dared to predict that the public would embrace this new art of communication and that it would be possible to coax musicladen ether waves into the home? Who would have dared to predict that the man-in-the-street could operapology to the phonograph. It will, ate a radiophone receiver as easily as he operates his phonograph? Yet all of this has come to pass.

A radio-telephone receiver is, of the household fresh and clear, not course, useless without something to receive with it. On Dec. 23, 1920, the Westinghouse Company placed in operation in the city of Pittsburgh a radio-telephone broadcasting station. The erection of this station was carried out with the thought that it would do much to stimulate the sale of amateur apparatus. A daily program was made up, and every hour music and speech danced off into space. This was the birth of a miracle in the electrical industry.

To say that the amateur demand for apparatus was stimulated is putting it very mildly indeed. When the residents of Pittsburgh became informed that there were music and voices in the air, many of them were uncontrollably curious and they hied themselves to the nearest electrical shop to investigate. Within a few weeks time they were standing five deep at the counters. The news travelled like wildfire. The newspapers took it up, and those who had not invested in a receiving set realized that they were missing something. Radio sales jumped skyward and they are still jumping.

Broadcasting Stations Over the East and Middle West

The Westinghouse Company, almost dumbfounded by the success of its venture, recovered quickly enough to establish other broadcasting stations in Newark, Springfield, Mass., and Chicago. The four stations now operating cover a large part of the East and the greater portion of the Middle West. As a result of the operation of these stations, the radiophone is today an American institution. It is not a passing fad. It is too serious and too utilitarian for that. Any device that will bring the living voices of such stars as Geraldine Farrar, Mary Garden,



How a broadcasting station looks from the inside. The artist's room in the radio broadcasting plant at Newark, N. J. The

sensitive transmitter, which picks up the vibrations of voice, plano, and other instruments, hangs at the right.

Mabel Garrison and Al Jolson into the home is going to remain with us. This is not all the radiophone will do. It will bring in lectures by prominent people, lull the children to sleep with bedtime stories, bring in late news as well as weather and market reports.

Once Radio Meant Specialty Sales of "Parts" to "Bugs"

During the past, many electrical dealers have been inclined to frown upon the radio business. They have regarded it as a hobby of boys and young men who like to dabble around with electrical things. In fact, this was perfectly true up until a short time ago. The larger dealers, realizing that it was necessary to stock numerous small parts such as tunning coils, binding posts, condensers, copper ribbon, detectors and the like, decided that the business was not worth bothering with. The items handled were small and inexpensive and there was little demand for assembled devices, since most of the "bugs," as they are called, insisted upon building their own apparatus for no other reason than the pure joy of doing it. Then, radio was so far removed from the electrical business in general that special sales talent was required intelligently to handle the youngsters and



Few indeed are the boys of 1922 who have not some kind of a first-hand acquaintance with radio, On Feb. 8, President Harding's message to the Boy Scouts of America was appropriately broadcasted by radio—and received by 40,000 scouts with their own sets.

men who were able to talk in terms of microhenries, microfarads and logarithmic decrements.

Some retail shops in the larger cities specialized in this apparatus and by doing this they were able to work up a considerable volume of business. This enabled them to employ one or more salesmen able to handle this type of customer. Of course, it was impossible for a dealer in a small town to follow this procedure since there was no hope of building this side of his business up to a point where he could establish

a separate department under the direction of a special salesman.

A large portion of the apparatus. sold in the past was ordered and delivered by mail. Numerous mail order houses were able to supply the wants of amateurs more effectively than the local dealer. This condition also helped to make the radio business unattractive to the dealer. Most of the amateurs were extremely discriminating in their choice of parts and the dealer simply could not hope to compete with the mail order houses handling this material.

Demand for Radio Sets Has Swept **Shelves Bare**

The radio business has changed almost over night. What was true six months ago is not true today. The public has been won over by radio, and as a result a demand has been created that is unparalleled by anything that has as yet happened in the electrical industry. In the early days, the telephone had a long, hard pull up hill. Since that time the public has become more accustomed to the wonders of science and today it is more ready to accept a revolutionary device if it can understand how that device is going to benefit it. The history of the telephone will never be duplicated by the radiophone. The layman who buys a radiophone

Radio Broadcasting Stations Now Operating

Newark, N. J. Westinghouse Elec- Here are fifteen centers from tric & Manufacturing Company, station WJZ. Wave length 360 meters. Program of news and concerts every evening at 8:05. Children's hour every Friday at 7:15 p.m.

Pittsburgh, Pa. Westinghouse Station, KDKA. Wave length 330 meters. Washington Observatory time broadcasted daily, except Sunday at 8 p.m. Government market and New York stock reports at 8:05 Special musical program 8:30 to 9:30 p.m. Organ recital every Sunday at 4 p.m.

Springfield, Mass. Westinghouse Station WBZ. Wave length 375 meters. Concerts and musical programs every Sunday, Monday, Wednesday and Friday at 8 p.m.

Medford Hillside, Mass. American Radio & Research Corporation station IXE. Wave length 350 meters. News, concerts and music every weekday evening, with sermons every Sunday.

which ethereal entertainment is being regularly projected. If you are within a hundred miles of any of these cities your market for radio receiving sets is exceptionally good.

Hartford, Conn. Station of C. D. Tuska Company WQB. Wave length 425 meters. Concerts on Tuesdays, Thursdays and Saturday evening.

Chicago, Ill. Westinghouse station KVW. Wave length 360 meters. Grand opera program every evening except Friday and Sunday opera season. Concerts Friday evening.

Madison, Wis. State University station. 9XM. Weather reports in code and then in voice, daily except Sunday at 12:35 p.m. with a wave length of 375 meters. On Fridays, special music at 7:30 p.m. at 800 meters. Same music at 8:15

at 375 meters. Various entertainments during remainder of evening at wave lengths between 330 and 375 meters.

Cincinnati, Ohio. Station of Precision Equipment Corp. 8XB. Wave length 375 meters. All evening on Monday, Wednesday and Saturdaymusic, vaudeville and sport reports.

Lincoln, Neb. State University sta-tion. 8YY. Widest range in that section. Concerts every evening.

San Francisco, Cal. Concerts by various commercial and hotel stations every evening in the week. Journal of Electricity and Western Industry, a McGraw-Hill publication, sends out a weekly radio-telephone industrial and business news bulletin on developments in eleven Western States. California Theater to broadcast performances nightly at 360 meters.

Los Angeles, Cal. Station in Hamburger's Department Store. Reported range 1,000 miles.

himself that all this he reads and hears is true. After he does this, he

The retailing side of the radio business has changed so abruptly that many of the merchandising houses are not as yet aware of the new conditions and of the vast possibilities that confront them. This is especially true in cities that are not provided with broadcasting stations. On the other hand, in cities like Newark, for instance, every dealer is alert to the situation and few of them have failed to put in a line of apparatus. Some dealers have made the mistake of thinking it would not be advisable for them to stock apparatus simply because their stores are not located in a city provided with a broadcasting station. Every store located in a city that comes within the range of a broadcasting station can easily work up a demand, since the music is available to everyone owning a small receiver.

The powerful broadcasting transmitters used have a very great range and they can be heard over surprising distances with comparatively simple receivers. Of course, the cooperation of the newspapers at the broadcasting centers has been a powerful factor in boosting the sales curve, but there is not a reason in the world why a dealer cannot stimulate a similar interest in the local paper. The fact of the matter is that many local papers have voluntarily taken up the subject of radio and are devoting considerable space to it. Several of the largest papers in New York City are running regular columns. Radio is so utilitarian and so positively wonderful that public interest is easily excited. The newspaper editors realize this and. then too, they also realize that they have an interest to guard.

Putting All Radio Parts into One Box

Radio has been reduced to the package idea. It is no longer necessary to purchase a multitude of small, intricate parts to assemble a receiver. A man can now go into an electrical shop and come out with a package containing a completely assembled receiver ready for service, just as he may come forth with an electric iron, fan or a vacuum cleaner. In the same package, or in a separate package, he can have the essential materials for the erection of a small aerial with complete direc-

today simply wants to first convince tions for its installation. The man through use and it is necessary to does not have to know a thing about radio. All of the work has been done for him and he has but to follow out directions which are as simple as any supplied with the many other electrical devices in daily use. The average man who becomes interested in radio has no more desire to build or assemble his own apparatus than he has to buy the parts of a phonograph instead of a complete machine. The fact of the matter is that radio had to be reduced to the package idea before the public would accept it.

Repeat Sales in Radio

There is a beautiful opportunity for repeat sales in the merchandising of radio apparatus. A man who purchases and installs a small inexpensive receiver which may cost him from \$25 to \$30 is bound to get a thrill when he tunes in his first program. The thing strikes him in a weak spot. In a few evenings he is thoroughly convinced that he wants a better piece of apparatus, since the smaller receivers are provided only with a single headset. This makes it necessary to pass the phones around to the various members of the family so that they can have their turn at "listening in." The man has heard of loud speakers which make the music available to the whole family and he immediately goes back to the place where he made his purchase and inquires about the possibility of attaching a loud speaker to his present outfit. Of course this is impossible, since his outfit operates with a crystal detector and he must purchase a vacuum tube receiver if he is to have the pleasure of using a loud speaker. That man is going to be a ripe prospect for a larger sale. He may go out of the store with a new outfit that will cost him anywhere from \$75 to \$300. His second purchase also comes completely assembled and neatly packaged.

Although the greatest volume of radio sales will be made in the form of packages containing complete apparatus, it will be necessary for every dealer to stock a few accessories and renewal parts as a matter of convenience to customers. These parts and accessories, however, are very simple and no special knowledge is needed on the part of the salesmen to dispose of them. For instance, the crystals used on the smaller receivers become insensitive

replace them. In the vacuum tube receivers, the tubes burn through continued use and they must also be replaced. Thus it is necessary to stock renewals. The sale of a tube, however, is quite substantial since the detector tubes retail at \$5 while the amplifying tubes cost more. It will be found advisable to have on hand a number of other items such as head phones, plugs, batteries, jacks, switches, etc. The radio outfit is like an automobile in many respects. There are many convenient little accessories that can be used with it. With a great volume of sales of the package outfits, the dealer can stock his accessory and renewal parts with a feeling that they are going to bring him some profit.

If a dealer builds his radio department up he may find it advisable to put in a supply of transmitting apparatus, since many men become real radio "fans," and when they reach this point they want everything that is to be had. As yet transmitting sets have not been made up in such a way that they can be sold in packages. It is necessary to buy the separate parts such as oscillating tubes, transformers, inductances, keys and the like and assemble them. The assembling work consists largely of connecting the various devices together.

The sale of this line of apparatus requires intelligent handling. The salesman must know what he is talking about and he must be able to give intelligent answers to the many questions that will be asked by people who need directions in their efforts to assemble a transmitting outfit. This angle of the business does not present any great difficulty. If receiving apparatus is stocked first and the radio department built up gradually, the salesmen can use a little of their spare time in "brushing up" on the subject. In most cases this is done voluntarily, since the writer has met few radio salesmen who have not been absorbed in their

Install a Receiving Set at the Counter

A dealer who puts in a radio department will find it advantageous to install a receiver and place it on the counter where the prospective purchaser will have an opportunity to convince himself that he can oper-

Announcing the "Home Electric Legion"

An Emergency Organization, Brought Forth with Broad, Bold Strokes, to Cope with a Terrible Situation

ESPERATE situations demand heroic remedies. Having discovered a desperate situation now situating flagrantly in the greatest field of commercial endeavor in the world, ELECTRICAL MERCHANDISING has dipped its heaviest javelin in its deepest ink-well and drawn forth the remedy in broad, bold strokes.

First, then, let us look the desperate situation full in the face. People have told us of its existence. Other professions have mentioned it in tones scathing, facetious and sarcastic. But we

hesitated to believe it.

Feeling, however, that we must know worst, we investigated. And gentlemen, what a situation did we find! We discovered, for one thing, that thousands and thousands of electrical men are preaching the "Home Electric" idea at their offices and stores and then going home to broom-swept living rooms, tub-shredded laundries and pan-washed dishes.

We have learned that when the New England Division of the N. E. L. A. made an investigation recently to find out how many employees and officials of central station companies are using electric appliances in their homes, they uncovered these horrifying facts:

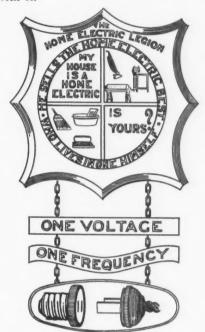
6,710 homes of electrical men were investigated. Of these fellow professionals of ours, more than half-3,769, to be exact—do not even use electric irons! 5,049 do not use electric toasters; 6,058 have no percolators; 5,593 are without electric fans; the homes of 5,934 are without electric washers; and when 5,055 ought to be using electric vacuum cleaners, they stir their dust around with brooms!

Out of this group of people whose business job is to sell electric service in the home, only about 20 per cent use any of the appliances except the electric iron.

Officers of the Home Electric Legion

- 1. Imperial Safety Switch
- 2. Exalted Convenience Outlet
- Supreme Renewable Fuse
- 4. Grand High Candelabra
- 5. Most August Parallel Plug

History shows that every time a group of people have been faced with a Terrible Situation, there has been brought forth an effective Organization to Cope



Here is the official decoration of the lome Electric Legion," conceived with oad, bold strokes to cope with a terrible union.

When glowing glamor of glittering gold drew adventurous men to California in 1848 a Terrible Situation arose. Some of the hard, adventurous men demanded money that belonged to other people. And the Terrible Situation consisted in the fact that the bold adventurers either got the money or fed their victims lead food, shot from guns. And with broad, bold strokes the law-abiding folks got together and formed the Vigilantes. And history records that the Vigilantes outcoped any situation-coping institution previously formed.

Similarly, during the Reconstruction Period following the Civil War a Terrible Situation arose in the South. Whereupon, the original and purposeful Ku Klux Klan sprang into being and coped night after night until the Carpet-baggers shrugged their shoulders and departed and the colored population again took up the profession

of being Southern darkies.

And so we, in the throes of our own Terrible Situation, have, as noted in the first paragraph, executed the necessary broad, bold strokes, and brought forth our own Coping Organization.

The Home Electric Legion has been organized to decrease the number of electrical men living in non-electric homes, and to seek out, honor and reward publicly those electrical men who live in "Homes Electric." The Constitution and By-Laws are given on this page for all to read. Official Decorations of this Order await the electrical men who will say: "I have made my residence a Home Electric."

From time to time we shall have pleasure in publishing the names of the Legion members, with their decorations, and if possible, pictures of the electric homes with which they won their honors. May the list outgrow

Constitution and By-Laws of the

1. The Constitution shall have no preamble, nor any paragraphs beginning with "Whereas."

2. There shall be no dues.
3. There shall be no meetings.
4. The object of the Legion shall be to seek those electrical men who live in Homes Electric, and decorate 'em; and 5. To encourage, persuade, entice, urge, exhort, impel, incite, provoke, instigate, lure, and inveigle all other electrical men to make their houses into "Homes Electric"; and
6. As fast as these electrical men acquire "Homes Electric," to award them the Decorations of the Order.
7. The Decorations of the Home Electric Legion shall be as follows:
CLASS D. To any electrical man living in a Class C thome Electric to which has been added an electric range, there shall be awarded—The Legion HELLO. CLASS B. To any electrical man living in a completely wired home with full quota of convenience outlets, electric lights, vacuum cleaner, washing machine, there shall be awarded—The Legion the Logion that the convenience outlets, electric has been added an electric refrigerator, there shall be awarded—The Legion the Logion that the convenience outlets, electric has been added an electric refrigerator, there shall be awarded—The Legion the Logion that the convenience outlets, electric has been added an electric refrigerator, there shall be awarded—The Legion the Logion that the convenience outlets, electric has been added an electric refrigerator, there shall be awarded—The Legion the Logion that the convenience outlets, electric has been added an electric refrigerator, there shall be awarded—The Legion that the convenience outlets, electric has been added an electric refrigerator, there shall be awarded—The Legion that the convenience outlets, electric to which has been added an electric refrigerator, there shall be awarded—The Legion that the convenience outlets, electric to which has been added an electric refrigerator, there shall be awarded—The Legion that the convenience outlets the convenience outlets the convenience outlets the convenience outlets the conv

HELLO with One Voltage and One Fre-

HELLO with One Voltage and One Exequency.
CLASS A. To any electrical man living in a Class B Home Electric to which has been added a garage equipped with electric light, electric vulcanizer, electric drill and electric air pump there shall be awarded—The Legion HELLO with One Voltage, One Frequency and the Standard Plug with Parallel Blades.

8. The Decoration shall be made of hard-drawn platinum, studded with pure radium.

hard-drawn platinum, studded with pure radium.

9. Due to the hazardous nature of the manufacture and delivery of the Decorations, they will be awarded in absentia, all decorations being scored as "awarded" when the name of the honor winner has been published in "Electrical Merchandising." tions, they will be awarded in absentia, all decorations being scored as "awarded" when the name of the honor winner has been published in "Electrical Merchandising."

*The HELLO is a unit of honor in the Home Electric Legion.

Electrical Merchandising The Monthly Magazine of the Electrical Trade

believes that:

ELECTRICAL men more generally must come to recognize the great and unparalleled opportunities for service to mankind which electricity affords in its manifold and increasing applications—in factories, construction work, transportation, shops, stores, offices and homes—and that to get more people to use more electricity, in more useful ways, is an obligation which devolves upon every electrical man, as his personal responsibility to the public and to the electrical industry.

ALL electrical men should themselves use electrical appliances and live in electrical homes, as a continuous living demonstration in their communities of the comfort and economy of "doing it electrically."

(For a complete statement of Electrical Merchandising's ideals for the electrical industry for 1922, see February, 1922, pages 52 and 53.)

When Equipping an Electric Home— Keep the Accent on the "Home"!

ALTHOUGH a demonstration Home Electric is, of course, only an exhibit, it is not primarily that. To the hundreds of men and women who visit it daily, it is primarily a home. A model home, perhaps, and the sort of thing they aspire to without expecting ever to have it in its entirety. But it is of interest to them only in so far as they see in it a real home, from which they can carry away suggestions which they could apply tomorrow to their own homes.

Hence the importance of keeping an "exhibition" atmosphere out of the Home Electric, and getting a "home" atmosphere in. Furniture should be chosen with care; electric appliances should not lie about in boxes with a "Do not touch me" air; and they should be shown in actual use just as often as conditions and the number of visitors permit.

Let Them Make Their Comparisons

IT HAPPENED in an electric shop in one of those busy Mid-West cities that constitutes the shopping center for a territory of 75 miles radius. A man from out-of-town walked in, inspected electrical equipment worth several hundred dollars, and then asked the salesman where in town he could find similar goods in order to make comparisons before purchasing.

"I don't think you'll find any similar merchandise in the city," was the reply.

And so the man from out of town walked out and found such for himself, later making his purchase at another store

But, comparisons, we think, should be encouraged, and customers should be given all information or assistance possible to aid them in finding out what goods are to be had elsewhere before paying out their money. How this type of customer service works out to the actual profit of the merchant is shown by the experience

of a motor car agency during a recently conducted "closed-car week."

With all the dealers in the city working together to bring about purchases of cars equipped with winter bodies, one dealer supplied closed cars to take his store visitors to the showrooms of other dealers. After the shoppers had looked over his own cars this dealer had his drivers take visitors to other agencies to make comparisons. And after a careful look around, many of the shoppers came back! Mr. Dealer was selling a good car, of course, but it is not difficult to believe that the sales he made that week were due in considerable part to the confidence inspired by his fair open-minded dealing with his customers and with the men who are in his own line of business.

What Is the Saturation Point of a Funnel?

**E'RE approaching the saturation point on electrical appliances" is a fair enough alibi for the quit-and-explain type of electrical dealer, but is it true? Hardly.

Aside from the sales records that are being continually made and surpassed by live electragists, we learn that the sale of hand-power cleaners is progressing at a phenomenal rate. A New York dealer in such wares, located away up in the Bronx, recently sold twenty-six on a single day, and the well-known shop of Gilchrist's in Boston made a one day's record of an even hundred hand vacs. When the roll-your-own cleaners can sell like that, there's a market for the electric.



The Purchase Price Covers Courtesy!

WHEN we asked a hardware salesman for a can of paint the other noon, he made such a pleasant job of getting us what we wanted that we decided he was working for a good store. And when we received our sales slip the idea was substantiated by this paragraph printed in its back:

"Every piece of merchandise sold in our store must give entire satisfaction to the purchaser. If it does not do this our service is not complete. Prompt and courteous service is just as much a part of the sale as the merchandise and you are entitled to it."

That seemed to us like a fine way to use the back of a sales slip. For one thing it was speaking directly to a purchaser. And having schooled the salesmen in the value of courtesy, this reminder to the customer was well placed.

Every month more and more people who earn their living by selling things to other people come to realize that the purchase price includes goods, satisfaction and courtesy. And every month shows added profit for those who make practical use of the realization.

Firemen, Spread Your Net!

INDICATIONS are that shortly one good salesman will be employed to do the work of several "representatives." We have survived the writing off of paper profits, the reduction of swollen inventories, the cutting

of wages. Our next problem is efficiency. Clerks and canvassers who toddle better than they talk, who know more about the movies than they do about motors, who care more for jazz records than they do for sales records, will soon be viewing the electrical business from the sidewalk. The business will be better then.

Who Made the Underwriters King of the Electrical Industry, Anyway?

Editor of ELECTRICAL MERCHANDISING:

I have read with much surprise and alarm the resolution that was passed at the recent meeting of the Western Association of Electrical Inspectors. They decided that they hereafter would use only "inspected electrical appliances," and that they would "deprecate and discourage divergence therefrom."
They say that "the sale and use of unapproved electrical devices tend to destroy the advantages sought from co-operative effort by the industry." And they are sending a committee or somebody to all the other electrical associations, and I suppose to the Amalgamated Sisterhood of Hardworking Housewives and the Consolidated Union of Careless Cooks, to tell them not to touch anything that does anything electrically, until they see an Underwriter's man and get his O.K. Coming on top of your article in the February issue of ELECTRICAL MER-CHANDISING telling the world how every insurance policy issued in New York State, for example, prohibits the use of electric light and all electrical appliances (and then says-"All right, go ahead!"), I'm frank to say this gets my goat.

I ask you-Who elected the fire-insurance man king in this country, anyway? Is he running the electrical industry for us, or have we got something to do with it ourselves? And if he is going to run it, why doesn't he put us on his payroll so we won't have to worry any more?

He says in his insurance policy:

CLAUSE FORBIDDING THE USE OF ELECTRICITY

This entire policy shall be void if electricity is used for light, heat or power in the above described premises, unless written permission is given by the Insurance Company hereon.

PERMIT FOR USE OF ELECTRICITY

PERMIT FOR USE OF ELECTRICITY
Privileged to use electricity in the above
premises for light and/or heat and/or
power, it being hereby made a condition of
this policy that where the equipment is
owned or controlled in whole or in part by
the assured a Certificate shall be obtained from the New York Board of Fire
Underwriters, and that no alterations shall
be made in that portion of the equipment
owned or controlled by the assured after
certificate is issued without notice thereof
being given to the said Board.

DYNAMO CLAUSE

If dynamos, exciters, lamps, motors, switches or other electrical appliances or devices are covered under this policy, this Company shall not be liable for any electrical injury or disturbance, whether from artificial or natural causes, unless fire ensues, and then only for the fire damage done outside of the particular apparatus where the disturbance originates; this limitation to be operative notwithstanding any provision to the contrary in the lightning clause (if any) attached.

Now, look-a-here. In the words of Pharoah, slaves?" "Are we men or are we Anyhow I'm one who believes that it is worth while organizing public opinion and putting up a fight, even if I am a slave-which I am not. But there are more of us than there are of him. There are more electrical men with businesses of their own than there are insurance companies, and if they have got to protect themselves so much against us, why can't we protect ourselves against them a bit, if they are going to keep on knocking everything electrical? Isn't it about time to warn our customers about the insurance man, so he can't frighten them so much?

I want to make a proposition. I recommend that hereafter in all centralstation contracts we write in this clause-

STANDARD CLAUSE FORBIDDING THE USE OF FIRE INSURANCE

This contract shall be void if any fire insurance is used in the above described premises, unless written permission is given by the Light & Power Company hereon. If any fire insurance is used on these premany fire insurance is used on these premises, the Light & Power Company reserves the right to cut off its service without notice, shutting off all light, heat and power, removing the meter, and cutting the service wires.

PERMIT FOR USE OF FIRE INSURANCE

Privileged to use fire insurance in the above premises, it being hereby made a condition of this contract that where the fire insurance policy is owned or controlled in whole or in part by the tenant of the house, a certificate shall be obtained from Second Assistant Office Boy of the Light & Power

Why, inquires our correspondent, shouldn't the electric-light companies and electrical contractor-dealers get together and formulate a "Standard Clause Forbidding the Use of Fire Insurance" in all electrically-wired buildings, along the lines of the underwriters' famous clause "forbidding the use of electricity"?

Also put in all contracts with customers, as our underwriter friends do, a clause stipulating that (1) the lighting company, in case the customer carries insurance unapproved by us, may cut off its electricity service and leave the house in darkness, and (2) the contractor may enter the customer's premises and rip out all wiring installed by him.

Let's ask our underwriter friends how they would feel about having the shoe on the other foot for once!

Company, and that no alterations shall be made in the policy or any part of the policy after this contract is signed without notice thereof being given to the Light & Power Company.

MENTAL ANGUISH CLAUSE

MENTAL ANGUISH CLAUSE

If a fire insurance policy or policies are used under this contract on the premises, the Light & Power Company shall not be liable for any anxiety, worry, fright, alarm, mental anguish or other pain or suffering whether from artificial or natural causes as a result of the warnings, forebodings and general misgivings displayed by the fire insurance man; this limitation to be operative notwithstanding any provision to the contrary in the fire-insurance permit clauses (if any).

I also recommend that hereafter in all house wiring contracts entered into between wiring contractor and a householder, this clause be inserted-

STANDARD CLAUSE FORBIDDING THE USE OF FIRE INSURANCE

USE OF FIRE INSURANCE

This contract shall be void if fire insurance is used on the above premises unless a written permit is given by the contractor. If any fire insurance is used on these premises, the wiring contractor reserves the right to tear out the wires and equipment which he has installed, without liability for the taking up of floors, cutting of walls, and other necessary work which must be done in the course of the removal of wiring and equipment.

PERMIT FOR USE OF FIRE INSURANCE

Privileged to use fire insurance in the above premises, it being hereby made a condition of this contract that where the fire insurance policy is owned or is controlled in whole or in part by the tenant of the house, a certificate shall be obtained from Red-Head Jimmie, or any other wireman's helper employed by the wiring contractor, and that no alterations shall be made in the policy or any part of the policy after this contract is signed without notice thereof being given to the wiring contractor.

If the fire insurance people are going to pick on us, why shouldn't we pick on them a bit, so that they will realize what it feels like.

As to the approving of appliances, ask you this also—Who is buying these appliances, anyway? When the public sees an appliance that they want to buy, they spend the money and take the appliance home and nobody can stop them. The fire insurance underwriters might just as well tell the department stores that they cannot sell kerosene lamps for fear somebody may buy one with a crack in it or may use it carelessly. If the purpose of the fire insurance companies is to hold back the progress of the electrical industry, they have certainly hit on a fine plan to carry it out, but as for me, I am going ahead and do my business. And if the fire insurance man does not stop warning my customers against me, I am going to start in and tell them a few things myself.

J. P. SAUNDERS.

Middleboro, Ohio.



Ideas for the Man Who Sells



A Booklet for Each "Home Electric" Visitor

Visitors to a "Home Electric" usually pick up any literature they find, and welcome especially a booklet which tells of the home as a whole. A supply of such booklets should be on hand when the home is opened. An example of what these booklets may contain in the way of a table of contents is offered in the booklet "The Electrical 'How' for Householders," compiled and published by the Pacific States Electric Company. In narrative form, it describes first "a day in a Home Electric," describing a typical day of Mr. and Mrs. Electrical Householder. Each page contains a list of the electrical equipment in one room. Following this are four pages of drawings and descriptions of electrical labor-savers. and four more pages of pictures and descriptions of standard wiring equipment conclude the book.

Salt Lake Store Uses Wheel of Fortune in Window Display

Capitalizing upon that trait of nature which urges man to take a chance, the Walker Electric Company, Salt Lake City, recently installed a novel window display, the popularity of which kept large



Window display of the Walker Electric Company, Salt Lake City, which consisted of a "wheel of fortune" operated from the outside. An appliance was given free of charge to any person spelling its name on the wheel.

Plans, Schemes and Methods Gathered from Successful Selling Experience to Increase the Sale of Electrical Appliances

crowds constantly in front of the

J. S. Walker, Jr., originated an electrically propelled "wheel of fortune" which was operated by a foot treadle placed on the sidewalk in front of the store. The wheel consisted of a large disk with the letters of the alphabet printed around its edge. The pointer was a large wooden arrow, spun by the foot treadle,

Take the Load Off **Both Ends**



COMFORTABLE chairs in the corner where you demonstrate electric cleaners are a good invest-And these chairs should be so placed, apparently by accident, that the prospect's attention is not distracted by the goings-on in the Take the load off a woman's feet as well as off her mind and your chances for successful demonstrations are doubled.

which came to a stop at one of the letters. A large card in the window invited the passer-by to try his luck in attempting to spell the name of some one of the electric appliances displayed in the window. If he was lucky enough to spell the name of a device it was given to him free.

Four Turtles that Sold Irons

BY C. L. FUNNELL

Not so long ago somebody offered J. E. Taylor, proprietor of the Taylor Electric Company, Pine Bluff, Ark., phibious turtles, in good diving condition, for 10 cents each. Mr. Taylor snapped at the bargain, and before the turtles could return the compliment their new owner had painted a big bold letter on the back of each of his new pets.

Next followed "R," "O" and "N" in rapid succession. Then the four animals, or shellfish, or reptiles, as you may prefer, were ceremoniously launched in a big galvanized tank in Mr. Taylor's front window.

People who stopped to look in read a sign telling them that the first person to find the turtles lined up to spell "IRON" could come in and claim a new electric iron free.

It seems probable that I. Turtle and R. Turtle had built up a violent mutual dislike, for only twice did they consent to pause side by side while "O" and "N" were similarly arranged.

The first time the four permutated as prescribed was on Sunday, and no free iron could be passed out. On the second occasion the turtles ungrouped before they could be officially observed. So no gift irons were awarded. More than a hundred dollars' worth of irons were sold in one week, however, as a result of the ingenious display.

Let the Sales Manager Watch His Step

A great deal has been written about the man who carried the message to Garcia. That Message-to-Garcia man, Rowan, was a selfreliant chap. He had confidence in himself. When he was told to go to Garcia with that message, he wasted no time in needless questions. He took the message and set out, depending upon his own resources to reach his destination and deliver the goods.

The country is full of sales managers who are always looking for men like Rowan, and there are plenty of such men in the selling game, but what I want to point out is that if Rowan went on his way without insisting upon being told what to do every step of the way, neither did the opportunity to acquire four am- his superior officer insist upon tying up his movements with needless instructions. It was recognized that the right man had been picked for the job and he was allowed to go ahead and do it as he saw fit. The reliance he placed upon his instructions was matched by the reliance his The first letter to go on was "I." instructor placed upon him.

has its lesson for the sales manager who sometimes follows up his men so closely that they have no independence of action, no chance for initia-

A sales manager, addressing an advertising club recently, told this experience. "I went to work," he said, "in a grocery and between jobs I studied how to make myself more useful to the business. One day the boss came home from the city with word that he had bought a carload of sugar.

"At once a very bright idea came into my mind, and the next day on my regular route, calling on customers throughout the village, I persuaded pretty nearly every housekeeper on whom I called that the first thing needed was at least a dollar's worth of sugar.

"Proud was no name for the lad who was very busy all the afternoon, putting up the orders for tomorrow's delivery. But pride goes before a fall, for when the boss appeared, his first words were, 'What's the meaning of this?' Of course I explained with gratification and expectation of praise, but he exclaimed, 'Young man, don't you know we lose money on every dollar's worth of sugar we sell?' And I had worked so hard to

It seems to me that that grocery clerk had done a fine thing, a remarkable thing for a young and inexperienced clerk. He had shown himself possessed of just the quality a man wants in the salesmen he hires. There was energetic interest in promoting the business. The boy had gone ahead and done something when most boys would never have troubled themselves with a thought about that sugar, save that it was well out of the way when piled in the employer's storehouse.

The blame lay with the boss. He hired a boy with the hope that he would take an interest in the business and try to sell goods. He neglected to inform him that he did not want sugar pushed like the rest of the stock. By jumping on that young clerk for his ambitious effort, he took the chance of killing that desirable quality in him. Sales managers sometimes make similar mistakes when their men have inadvertently done the wrong thing for lack of instructions.

Cautions and precautions for the salesman are the sales manager's stock in trade, but the sales manager also should watch his step.

They Hang Their Hats on "Henry" and Sell All Over Town



This "Itinerant Sales Crew" of the Texas Light & Power Company is supplied with transportation and guidance by the crew leader, who drives a special Ford. Ralph

Broyles, seated on the running board at the left, is pilot and executive officer for this team of house-to-house electrical missionaries.

In Texas they've found that electrical business really does come to the men who go after it. The Texas Power & Light Company proved it with a crew of salesmen who cover residential districts so systematically that the electrical story gets spread over every block.

The center of gravity of this group of hustlers is a specially designed sales truck mounted on a Ford chassis. G. B. Richardson, merchandise sales manager for the company, designed the body with the needs of his "Itinerant Sales Crew" particularly in mind. Shock absorbers and a small truck body make the delivery of electric washers and cleaners a simple matter.

Street Cars Never Worry These Salesmen

It is in transporting the crew, however, that the machine effects its greatest time economy. The crew leader takes the men out in the morning, dropping them off at given places in the territory being covered.

At noon the leader calls at a designated corner and takes the men to lunch. When a salesman has covered the territory laid out for him, he telephones the office, and the crew leader picks him up and takes him to his next location. This saves waiting for street cars and cuts out the long walks in suburban districts not favored with transportation systems.

The car itself, Sales Manager

value to two salesmen. Wherever the car is driven, whether full of salesmen or loaded with appliances, it attracts attention and gets people thinking about electric washers and cleaners.

"The car is all over town every day," explains Mr. Richardson. "People see it and talk about it. When they do that it isn't difficult to sell them electric appliances!"

Her Work Is Done When It Comes to "Cleaning Up"

A woman said the other day that, since she had her vacuum cleaner, she no longer dreaded "cleaning up" as the most tiresome part of her housework-that "her work is done now when she comes to the cleaning up point!" What she meant was that every household task-whether the preparation of meals, sewing, or cleaning a closet-had meant the disagreeable and sometimes more laborious task of "cleaning up' afterward. Now, with her vacuum cleaner, she can regard her work as done when she starts the cleaning up.

The vacuum cleaner salesman who carries that thought in his head will probably find it has a more real appeal to many housewives than a general statement of the number of hours of labor she will save. This all goes to prove that persistent effort to discover just how a woman thinks about her work will reveal the sound-Richardson believes, is equivalent in est basis on which to build up a sale,



Sales Helps for the Dealer



Extending the "Interchangeable Fixture" Idea to Commercial Lighting

The interchangeable wiring devices for suspending commercial and industrial lighting units developed by the Benjamin Electric Manufacturing Company, Chicago, are comprehensively described and pictured in a new bulletin, "Interchangeable Devices," issued by the company.

This recent contribution to the art of wiring for commercial and industrial lighting provides, as the booklet points out, "primarily a complete and permanently wired electrical outlet."

"To this permanent 'Ben-ox' outlet may be connected easily, quickly, interchangeably, various types of lighting equipment wherein both electrical and mechanical connections are made simultaneously and all without disturbing the original wiring connection.

"The day of the fixed lighting unit, permanently hung and wired to the building, is passing. Users of lighting equipment in the future, industrially and commercially, will demand flexibility. The very fixity of the so-called lighting fixture works a hardship on the occupant of the building, because it places a restriction upon the character of illumination which he can obtain.

"'Ben-ox' interchangeable devices provide a permanently wired outlet, so that reflectors or lighting units of varying types may be attached to an outlet readily, by anyone, and any number of modifications made in the original installation, without it being necessary to disturb the wiring.

"The basis of the 'Ben-ox' system is an outlet box fitting, providing means for connecting both mechanically and electrically, at one motion, a variety of forms of lighting equipment. A typical 'Ben-ox' outlet box fitting or basic element consists of receptacle casing, with supporting strap and socket terminal base. Connections to the outlet box are made either direct to the ears on the box or to the usual fixture stud, by means of a mounting stirrup. Wiring is easily done by running the

Show Window, Counter, Mail Advertising and Specialty Aids Which Manufacturers Offer to Help You Get More Trade

wire through the openings provided in the receptacle casing. Canopies of various depths and diameters may now be attached to the exterior threads of the basic element by a screw ring, so as to make a complete cover for the outlet.

"Thus a 'Basic Unit' is formed. Upon this unit any one of a number of styles of lighting equipment may be added at any time by an operation as easy as screwing in an attachment plug. The interior thread receives the keyless socket element, pull-chain socket element, shade holders and connectors."

The booklet lists the advantages actual saving of the new interchangeable devices ter method, as follows: They permit the completion of wiring before the use of unreliability rooms has been determined—espeinto account.

cially advantageous where the space is to be occupied by tenants. Also, without disturbing the wiring, they permit easy removal of reflector or entire pendant unit for cleaning; change of lighting unit styles; and the removal of lighting equipment during redecorating.

"Less Expensive than the Iceman"

A forceful window poster addressed to all "consumers of ice" is available for dealers on application to the McClellan Refrigerating Company, Roosevelt Road and Washtenaw Avenue, Chicago. A little table comparing the cost of the icebox method with electric refrigeration shows an actual saving of money with the latter method, if cost of food spoiled due to faulty refrigeration and the unreliability of the iceman are taken into account.

Furnishing the Contractor a Window to Demonstrate Lighting



At the new salesrooms of the Holophane Glass Company, Inc., 342 Madison Avenue, New York, a complete store front affords contractors an opportunity to show their customers how window-lighting equipment looks when installed. Displays are set up in these windows, and contractors are in-

vited to make use of this practical sales help in talking new lighting equipment to customers. Another of the company's aids for dealers is a folder entitled: "A Way to Sell More and Better Window Lighting," in which letters, booklets and newspaper electros on lighting devices are shown.

ered in New Manual

A new book on storage battery service by Donald E. Blanchard, E.E., has been pub-lished by the U. P. C. Book Company, 243 West Thirty-ninth Street, New York. In-cluded with the volume is a trouble chart on which thirty-one defects are listed, with their causes and proper remedies.

To electrical men interested in the charging and repairing of storage batteries, the recently issued "Battery Service Manual" by Donald E. Blanchard, E.E., will prove valuable. In addition to plans and layouts for battery stations, the book carries practical information on the management of the battery end of the business. Forms and order systems are shown, together with a table of charging rates, a glossary of terms and a list of manufacturers of batteries and battery equipment.

In the preparation of his material for the book, Mr. Blanchard visited a large number of shops, service stations and garages handling the charging and maintenance of storage batteries and he has given particular attention to solution of the problems of the smaller shop.

Adapting Small Motors to Twenty-six Every-Day Jobs

"Popular Motor Mechanics" is the title of an ingenious booklet just issued by the Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Twenty-six ways of using small motors to make everyday jobs easier are clearly described and illustrated.

On the first page, for example, the reader is told how to take an old bicycle sprocket, chain and rear and a curtain. A playlet in two acts

Storage Battery Service Cov- wheel, connect them with a small electric motor and drive the family ice cream freezer. Turning over the page, the man with an axe to grind finds an easy way to get the stone turned via electricity.

> Among the other practical uses for small motors, applications are shown for an electrical eraser, revolving window display, portable drill, sand sifter, egg beater, and water pump. It is a safe guess that a few copies of this book, distributed to customers of the electric shop, will start dozens of home experimenters on a career of electrical labor saving.

A Marionette Show for Demonstrating the New Light Switch to Passers-by

Put life-size but motionless figures in the display window, and most of the crowd will pass by. Put in even the tiniest figures that move and act and tell a story, and everyone will be drawn to stop and watch.

A miniature marionette show that makes the most of this quirk of human nature is being offered dealers by the Tremont Products Company of Boston. It is intended to tell the story of "Staylit" switches -the lamp socket switch which automatically keeps the light burning for a full minute after it has been turned off-and then automatically extinguishes it.

The tiny stage has proscenium

is announced. The curtain rises. Mr. Light-user enters to the accompaniment of a monologue spoken from behind the scenes through a loud-speaking telephone, turns on the light and attends to the furnace. He then turns out the light, is immediately plunged in darkness, tries to find exit, and smashes into the edge of the cellar door. The second act shows the same cellar, the next night. Our hero has installed a "Staylit." He enters, attends his



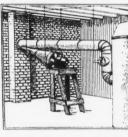
Everyone likes a marionette show, as attested by the crowds that ordinarily gather around this window when the miniature play is on. It tells the story of "Staylit" switches, and the entire outfit is offered dealers by the Tremont Products Company. Boston.

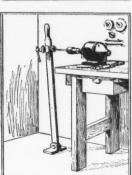
furnace, and turns off the light. But this time he is not immediately left in the dark-he has ample time to leave the cellar, close the door-and then the light goes out automatically!

Cleaner Manufacturers Start Nation-wide Co-operative Publicity Campaign

The first national co-operative advertising campaign of the Vacuum Cleaner Manufacturers of America was launched this February, to continue for nine months, in leading newspapers. The purpose of the drive is to educate the housewife to the advantage of electric vacuum cleaning, and at the same time provide tangible cooperation with those distributing and selling cleaners.

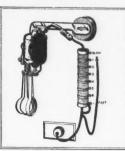
The manufacturers, who will in no way abate their individual advertising, will feature the slogan of the cooperative campaign, "Banish dirt and dust with the electric vacuum cleaner," in their own announcements. Most of them have supplied their dealers with proofs of the initial advertisement and the schedule of insertions, so that the retailers may effectively couple their local sales and advertising with the move-







Six Pictures that Tell the Motor Story





Here are six of the illustrations from the new booklet of small motor fascination entitled "Popular Motor Mechanics," issued by the Westinghouse company. Twenty

other ways to make small motors do useful jobs about the home are shown in this little volume, which is issued as a part of the company's small motor merchandising plan.



Lighting Sales Methods



Special "Lighting Service" Department Swells Lamp Sales Sixty-fold

A lamp business which has grown from \$500 a year to \$30,000 a year during the past five years under the direction of Glenn Arbogast, manager and part owner of the store of the Newbery Electric Corporation of Los Angeles, has necessitated the installation of a special department devoted entirely to the sale of lamps alone.

The Los Angeles store was recently remodeled and a total of \$5,000 spent in establishing a department for assisting customers in securing the best possible from lighting service. Advice is furnished by special lamp salesmen, and equipment is available for demonstrating the possibilities of each type of lamp.

The counter sales, which comprise half of the lamp business carried on by the store, are filled directly from the shelves while large orders from mercantile firms, industrial plants and theaters, which have been cultivated by a special staff of lamp salesmen, are filled from stock, inside of from one to three hours.

Items of Experience
in the
Installation of Lighting Systems
and Some Good Advice in
Lighting Practice

Intensive sales efforts in the recently introduced 25-watt blue lamp for outdoor sign illumination have convinced merchants that better standards of illumination really bring more customers to the store. While doing a general contractor-dealer business, the Newbery Corporation has proved that there are profits to be derived from specializing.

Using Envelopes to Carry the "Convenience Outlet" Story

When the Electric Outlet Company of New York sends out first-class mail, it makes full use of the direct advertising value of its envelopes. The firm's return address is carried on the back of the envelope, and on the face, in the upper left hand corner, there appears this inscription.

"What Wiring Is Within the Walls? The present and future usefulness of any building depends upon the number of its electric outlets."

That's using a constructive message in a constructive way.



The special lamp sales department in the Los Angeles store of the Newbery Electric Corporation, made necessary by a lamp Susiness which has grown from \$500 to

\$30,000 annually during the past five years. The department was only recently installed at a cost of \$5,000. A specialty is made of large-order lamp business.

Ohm's Law Applied to Merchandising*

Ohm's law states that electrical pressure, measured in volts, divided by resistance, measured in ohms, equals flow of current, measured in amperes. We may apply this same law to the merchandising of any article by defining volts as the amount of sales pressure exerted by the salesman, ohms as the amount of sales resistance inherent in the customer (reluctance to part with nis money), and amperes as the volume of sales. It is clear, then, that in order to increase the volume of sales we must either increase the sales pressure or reduce the sales resistance. In other words, the reluctance of the customer to buy must be overcome by the desire of the salesman to sell.

The Buying Idea

Every actual sale is preceded by a mental sale. The sale really takes place in the customer's mind, and the exchange of money for merchandise is merely the final act in a train of events that collectively constitute what we call the "sale." The mind, therefore, is the thing we must work on. But how? That word idea which I have used in connection with the phrase "buying idea" gives us the clue to what must be done.

I -stands for Interest;

D-stands for Desire;

E-stands for Enthusiasm;

A—stands for Action.

These are the four steps that lead up to and result in a sale. First we must get the buyer's interest in the merchandise offered. This may be accomplished by advertising, by show window displays, or in any of the many ways in which a person's attention is attracted to an article of merchandise. Next we must create desire to possess the article, for interest without desire does not result in action.

When a customer comes into your store to inquire about a particular article the first two steps toward the

^{*}This is the striking title of a talk recently given to a convention of electrical contractor-dealers by Charles Henry Mackintosh, president of the Associated Advertising Clubs of the World. We give herewith an abstract of Mr. Mackintosh's address as printed in "Beardslee Talks."

sale have, as a rule, already been taken. He (or she) is interested and desire, to some extent, has been created. Now is the salesman's opportunity to instill enthusiasm, which is the third step in selling. Enthusiasm is desire raised to the nth degree. A woman who is merely mildly interested in an electric washing machine or vacuum cleaner may be enthused by a demonstration, if the salesman, by his comments while the demonstration is in progress. keeps constantly before her the idea of self-interest-pointing out how the possession of the particular laborsaving device under consideration will lighten her household duties.

Final Steps in the Sale

In every sale the customer mentally weighs a certain sum of money (the purchase price) against a certain service and then weighs the value of this service against some other service that an equal sum of money will buy.

Desire generally outruns income, and when you are talking to a woman about a washing machine she may be saying to herself that for the same sum of money she could buy a talking machine she has long wanted and is imagining how well it would look in a corner of the living room and what fun they could have foxtrotting to its music. You have got to get her enthusiastic over the washing machine to dispel this conflicting buying impulse, or her money will go into the cash register of the talking machine dealer instead of into your cash register.

Interest, desire and enthusiasm lead to action. This is the final step in the sale. Little by little, as the sales pressure of the salesman has increased, the sales resistance of the customer has diminished, until at last there comes that joyful moment when the customer says: "I'll take it," and the sale is made!

Voltage divided by resistance equals amperes. Sales pressure divided by sales resistance equals volume of sales. Just at present the ohmic resistance of customers is higher than usual, but this does not mean that sales cannot be made. It does mean, however, that the lowvoltage sales methods of past years will no longer do. The stores have the merchandise, the people have the money, and all that is needed to get the merchandise moving to the people and the money to the stores is more high-voltage salesmen.

Lamp Shades Made by the Physically Handicapped



An exhibit of lamp shades made by crippled workers who are being trained by the Chicago Service League for the Handicapped. It is surprising the amount of beauty and quality that are put into this merchandise. Each article well nigh ap-

proaches perfection; in some cases it is indeed perfection, for not only does the worker put merely the skill of his hands into his work, as most workers do, but the heart and soul of the unfortunate seem to be put into his product.

PRACTICAL application of the A Golden Rule is the Chicago Service League for the Handicapped, a philanthropic organization incorporated under the laws of Illinois. Its mission is "effectively to reconstruct, re-educate, and re-train those handicapped from disease or accident and to place them in selfsupporting positions."

The league is a "going" concern, kept alive by the contributions of public-spirited men and women and by the sale of articles of value made by the crippled men and women that it is rehabilitating. It is not absolutely self-supporting yet. But it undoubtedly will be when the buying public realizes that the articles it offers for sale are the result of the efforts of expert workmen, the work of men and women whose avocation as well as vocation is work.

Briefly the Service League for the Handicapped functions in two ways: First, it gives the crippled man or woman a chance to become self-supporting and independent. The applicant is given a free medical examination and special treatment for his ailment until he is, as far as possible, restored to normal physical condition; second, turned into the treasury of the it provides the means to re-educate league and applied to expenses. the applicant to become a skilled The majority of these expenses is his disability is not a handicap. unfortunate.

Then it places him in a self-supporting position.

The applicants are recruited from those crippled in accidents in civil life. Every year the number of these unfortunates equals twice the total number of American soldiers disabled in the World War.

These applicants are taught to do various kinds of work. They make articles of reed and wicker, lingerie, children's fancy dresses, linen handkerchiefs, children's toys, sofa pillows; they do rug weaving and brush making; they make electric lamps, the men turning out the metal, wood or wicker bases and the women fashioning the silk shades.

The merchandise that is turned out is marketed in the large department stores and electric shops in the community by representatives of the league. A space on its premises is allotted to the league by a well-known local shop or store.

Sometimes a display and sale of league merchandise is going on at several shops at once. Then, again, the stuff is marketed at church fairs, socials and bazaars and at sales inaugurated in the homes of the well

The proceeds of these sales are worker in some occupation in which expressed in the salary paid to each

Clamoring for Radio

(Continued from Page 92)

ate it. Every man, or woman for that matter, who is allowed to tune in music or speech is going to get a real thrill out of it and a sale is going to be just that much easier to make. This business of pulling a human voice out of space is enthralling, to say the least. The pure novelty of it, aside from the other aspects, appeals strongly to a person. At the same time they are thoroughly convinced that the operation of the thing is not beyond them, and the importance of this discovery on their part cannot be over-estimated. Radio is a new thing. The man in the street does not know the difference between a radio outfit and a Wheatstone bridge. If he finds that the operation of the receiver is largely a matter of turning a knob, the whole idea is more acceptable to him.

Radio is here to stay. Of this there can be no possible doubt. The sales curve is shooting upward in an almost perpendicular line. As yet only a very small percentage of the population has come in contact with the broadcasting stations themselves. Yet the sale of apparatus in the Eastern and Middle Western states is climbing upward rapidly. When the erection of the other broadcasting stations that are planned is carried out, the entire country will be "radioized."

It will be many years before this country of a hundred million souls is saturated with radio apparatus. The phonograph has been going strong for fifteen years and it has not as yet reached its highest mark. Present indications are that radio is going to outstrip the phonograph, and the next ten years at least are going to be radio years.

Nothing can approach radio in its appeal to the whole family. The children like it, mother and father like it and grandma and grandpa enjoy it as well. Its educational features appeal strongly to modern parents and yet it is not a toy although the children will get a good deal of pleasure out of it. An electric iron appeals only to mother, while father may lean strongly toward an electrically-heated shaving mug. Grandpa and grandma like to chase away their chills before a small reflecting electric heater, and little Mary thinks there is nothing like her electric stove while her

brother is all wrapped up in his electric railroad. Sister Katie (age 18) simply couldn't do without her electric curling iron. While every member of the family has their pet electrical device, radio appeals to all of them. Anything with the whole family standing back of it, is going to have a low sales resistance to overcome.

Selling to Nine Kinds of Customers

1. The Good Natured Customer: He smiles at your efforts and laughs at your work. Smile with him and laugh at your own expense. It helps the sale.

2. The Doubting Customer: The one who questions and doubts every statement you make. Printed facts and figures go a long way toward silencing this skeptic.

3. The Disputative Customer: Welcomes a dispute so he can prove his knowledge of things. A mild form of combat pleases him. Use care not to overstep the mark.

4. The Taciturn Customer: One of the hardest types to handle. You have no way of telling by word of mouth if you have succeeded in arousing interest. Watch the eye of this person and be less talkative than with the usual type.

5. The Technical Customer: Usu-

ally a professional man. To say you "guess" or "think" spells ruin when making your plea here. You must know and be sure with this kind.

6. The Impolite Customer: Rarely, if ever, encountered by a polite sales-

7. The Price Customer: The person who buys price first and article afterward. This type is easily sold by asking him to recall some purchase where price was the only factor. Call attention to the well-known fact that "the memory of quality lingers long after price is forgotten."

8. The Comparative Customer; Compare article with article is the maxim of this type. When you note the comparative prospect at work use the same tools. Compare your goods with the other fellow's just as this prospect does and likes to be done by.

9. The Customer Who Cannot Say "Yes": To this type you must act as both salesman and buyer. As soon as you observe sufficient interest in your article is aroused, close the sale quickly.-Good Hardware.

A. R. Maujer, formerly of the salesengineering force of the Pittsburgh office of the Cutler-Hammer Manufacturing Company, manufacturer of electric controlling devices at Milwaukee, has been appointed manager of the Cincinnati office of the company, which has recently been moved from the Gwynne Building to Dixie Terminal Building.

Record of Lighting Fixture Patents

Issued from Jan. 10, 1922, to Jan. 31, 1922

Compiled by NORMAN MACBETH

Consulting Illuminating Engineer, New York City

Mechanical Patents

Mechanical Patents

1,402,735. Hand Portable Electrical Receptacle. Reuben B. Benjamin, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Filed June 4, 1919. Issued Jan. 10, 1922.
1,403,078. Electric Arc Lamp. John Allen Heany, New York, N. Y. Filed June 11, 1917. Issued Jan. 10, 1922.
1,403,273. Electric Bulb Protector. Weston R. Smith, Jackson, Mich. Filed Nov. 3, 1920. Issued Jan. 10, 1922.
1,403,548. Lamp Vaporizer. Leo Gudeman, New York, N. Y. Filed Sept. 10, 1920. Issued Jan. 17, 1922.
1,404,066. Lamp Shade Holder. Charles C. Stevens. Los Angeles, Cal. Filed Jan. 13, 1921. Issued Jan. 17, 1922.
1,404,184. Electrical Connector Device. Reuben B. Benjamin, assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Filed Oct. 9, 1917. Issued Jan. 24, 1922.
1,404,635. Lamp Shade. George H. Smith. New York, N. Y. Filed Oct. 30, 1920. Issued Jan. 24, 1922.
1,404,731. Electrical Receptacle. Reuben B. Benjamin, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Filed Oct. 9, 1917. Issued Jan. 31, 1922.
1,404,732. Combination Electric Light Fixture. Reuben B. Benjamin, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Filed Oct. 9, 1917. Issued Jan. 31, 1922.
1,404,733. Electric Fixture. Reuben B. Benjamin, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill., Electric Manufacturing Company, Chicago, Ill., assignor to Benjamin Electric Manufacturing Co

31, 1922.

1,404.733. Electric Fixture. Reuben B. Benjamin, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Filed March 3, 1919. Issued Jan. 31, 1922.

1,405,221. Magnetic Lamp Holder. Howard Jenkins, Los Angeles, Cal., assignor to Edwin A.

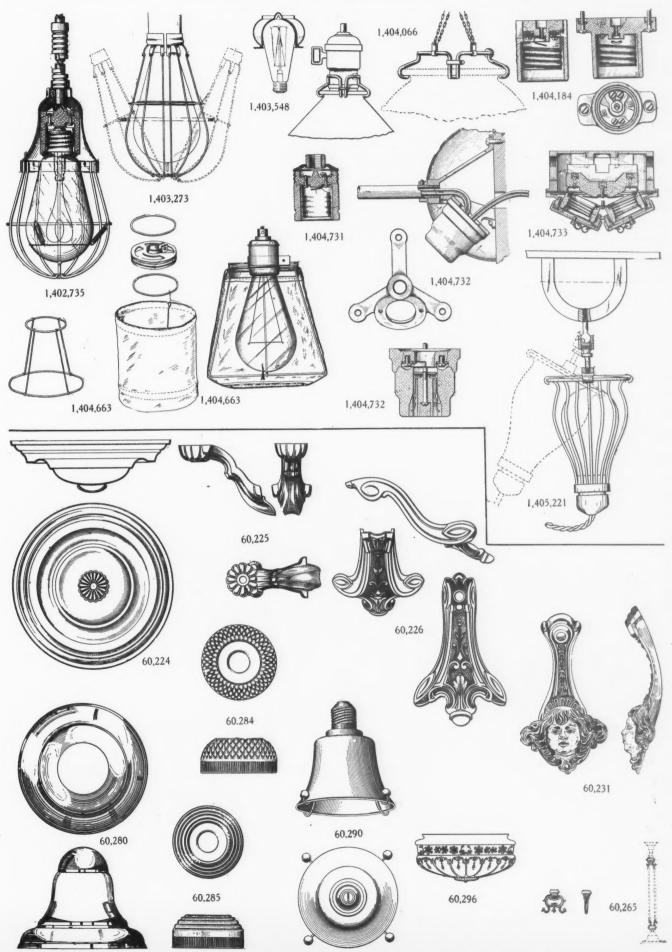
Parkford, Los Angeles, Cal. Filed April 20, 1920. Issued Jan. 31, 1922.

Design Patents

The following are ALL the design patents pertaining to lighting materials, issued by the U. S. Patent Office, from Jan. 10, 1922, to Jan. 31, 1922, inclusive.
60,224-26. Electrical Fixture Bowl, and Fixture Arms. Maurice H. Dworkin, New York, N. Y. Filed April 19, 1921. Issued Jan. 17, 1921. Term of patent, three and one-half years. 60,231. Electric Fixture Arm. Julius S. Garfinkle, New York, N. Y. Filed April 11, 1921. Issued Jan. 17, 1922. Term of patent, seven years.

21. Issue ven years. 60,265.

1921. Issued Jan. 17, 1922. Term of patent, seven years.
60,265. Double Fixture Loop for Lighting Fixtures. Afred W. Reiser, Toledo, Ohio, assignor to the Reidon Company, Toledo, Ohio. Filed March 24, 1921. Issued Jan. 17, 1922. Term of patent seven years.
60,280. Canopy for Lighting Fixtures. Lester R. Wellman, Chicago, Ill., assignor to Friedley Voshardt Company, Chicago, Ill. Filed April 30, 1921. Issued Jan. 17, 1922. Term of patent, seven years.
69,284-85. Attachment Plug Cap. Henry William Appleton, Passalc, N. J., assignor to the Bryant Electric Company, Bridgeport, Conn. Filed Aug. 5, 1921. Issued Jan. 24, 1922. Term of patent, fourteen years.
60,290. Bell Attachment for Electric Lights. Louis A. Freedman, New York, N. Y. Filed April 27, 1921. Issued Jan. 24, 1922. Term of patent, fourteen years.
60,296. Bowl for Lighting Fixtures. Alfred W. Reiser, Toledo, Ohio, assignor to the Reidon Company, Toledo, Ohio, Filed March 24, 1921. Issued Jan. 24, 1922. Term of patent, seven years.



Copies of illustrations and specifications for patents may be obtained from the Commissioner of Patents, Washington, D. C., for 10 cents each

New Merchandise to Sell and Where to Buy It

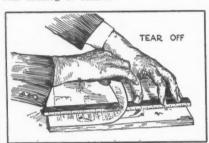
Appliances, Socket Devices and Wiring Supplies Which Manufacturers and Jobbers Are Putting on the Market

Including Many New Appliances Suitable for the Home Electric

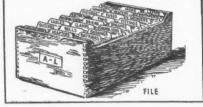
How to Use These Pages to Make Your Own **Buying Index**

Beginning with the September, 1917, number ELECTRICAL MERCHAN-DISING has been furnishing its readers with the selective new-merchandise catalog service continued on these pages. By tearing out those items which affect your business and pasting them on filing cards, you can make a buying index that will put information on what is made and who makes it right at your finger's end.

Every item, with its illustration, will fit a standard 3-in. by 5-in. filing card. Or, if preferred, these items can be pasted on sheets of paper for binding in a looseleaf catalog or folder.







This section "New Merchandise to Sell" is an editorial text section prepared by the editors solely in the interests of readers of ELECTRICAL MERCHANDISING. As its title explains, its purpose is to put before our readers information concerning the new merchandise and latest inventions on the market.

To be described here, articles or devices must be new and of general interest to our readers. These descriptions are solicited from all manufacturers, and the items are published free of all cost to the maker of the device, and without respect to advertising or any other consideration, except their interest to the reader. The editors are the sole judges of what shall appear in this section, and readers may depend upon the independent character of this service.



Service Husk for Lighting **Fixtures**

Electrical Merchandising, March, 1922

Making use of the pendant that forms a decorative part of many lighting fixtures, the Thomas Day Company, San Francisco, has converted this into a service husk concealing a receptacle to form a convenient outlet for table appliances, lamps, etc. When not in use, the husk forms an attractive part of the lighting fixture, but when an extra outlet is needed it is easily snapped open.

Clothes Washer with Folding Wringer

Electrical Merchandising, March, 1922

A folding, swinging wringer is one of the features of the new "Cadillac Junior" clothes washer developed by the Cadillac Washing Machine Company, 325 West Ohio Street, Chicago. The wringer folds under the cover out of sight when not in use and can be swung and locked in four positions.

Externally, the new washer is a smooth, steel cabinet, occupying a floor space 17½ x 18½ in., and with a table top. The motor is a Westinghouse; the entire operating mechanism is mounted on a solid cast base, and all gears and clutches are inclosed in a gear case, filled with hard oil. All controls are grouped together at the top of the machine, but are concealed by the cover when not in use. The cylinder, of the oscillating type, is made of copper. The frame is recessed, to permit easy draining.





Bathroom Wall Heater

Electrical Merchandising, March, 1922

Electrical Merchandising, March, 1922
Designed to furnish an auxiliary heater in bathroom or other rooms where required, while taking up no space in the room itself, is the "Jackson" electric wall heater, made by the William H. Jackson Company, 2 West Forty-seventh Street, New York City. It is made to set in a recess in the wall, which should be provided before the tile work is done. The register grill is of cast brass, and may be had to match the other fixtures in either nickel, silver or gold. The rating is usually 1 kw., although they may be had in capacitles to suit the requirements of individual users.

Electric Mantel Clock

Electrical Merchandising, March, 1922

Furnished in a mahogany case, the electric mantel clock made by the Sterling Clock Company, 220 East Forty-Second Street, New York City, has a self-winding movement, which is automatically rewound once a minute. The duration of the winding contact is 0.015 of a second. The energy consumed by the clock is less than 4 amp.-hr. a year. The time-keeping feature of the clock is a large size seven-jewel movement, with the power train removed. Power from the main spring is applied directly through a pawl to a 120-tooth ratchet wheel, which is mounted on the center shaft of the movement. As the clock is wound each minute, the main spring tension is practically uniform at all times insuring accurate time-keeping. The watch movement is easily removed from the electrical assembly for cleaning and re-

pairing. The electrical features of the clock consist of a pair of laminated core magnets, and armature, and a positive wiping contact.

The mahogany case has a cast-brass gold-plated door, and circular finished silvered dial, black hands and figures. This type of clock is operated by a flashlight type of battery which will run the clock for approximately one year.



Safety Switch for Electric Ranges

Electrical Merchandising, March, 1922

Telltale lights that tell when the current is on, and so protect the housewife, are a feature of the new safety switch for electric ranges, made by the Electrical Manufacturing Company, 4149 East Seventy-ninth Street, Cleveland, Ohio. On the face of the box are two red bull's-eye lenses with lamps beneath, connected across the load side of the switch.

When the cooking is done, the switch is opened by a touch of the trigger release and the lights go out. If there is a short circuit on either of the two sections of the standard three-wire range, the service fuse on the side of the line supplying that section will blow and the telltale light on that side will go out, thus indicating at a glance, it is said, which section of the range is out of commission.



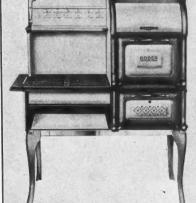
Electric Breakfast Stove

Electrical Merchandising, March, 1922

Con the new "Simplex" breakfast stove, a table device that broils, boils, toasts or fries, a complete breakfast or an "after-the-show" snack can be cooked conveniently right at the table. It is made by the Simplex Electric Heating Company, Cambridge, Mass. A three-heat control is one of its new features. Two tumbler switches are in the base and a touch of thumb and forefinger produces any heat desired. Two aluminum cooking utensils, one quart and one pint size, are provided with the stove, together with two polished steel deflector pans. For boiling, one is used as cover and one as a de-



flector underneath the element. The frame is made of "Monel" metal, with an outside ring of nickel-plated brass. The rating is 660 watts.



Electric Range

Electrical Merchandising, March, 1922

To obtain flexibility of heating units in the new electric range offered by the George D. Roper Corporation, Rockford, Ill., the top burner elements are made up from a multiple of low temperature units so that each burner can have from a minimum of 1 amp. in a single unit to an almost unlimited amperage of, say, 25 amp. from twenty-five single units. The units are arranged in parallel within a square 8 in. or 9 in. wide.

With this arrangement, for example, in the 16-amp. element, should one unit burn out, the element would continue to operate at 15 amp. Should three units burn out the element would continue to operate at 13 amp. and so on. Further, in case any unit burns out, it can be removed without the use of a tool, and a new one slipped in its place.

The control switches and the switch-

place. The control switches and the switch-board with heat switches are placed at the back of the stove above the top burners, where they can easily be read.

Household Movie Machine

Electrical Merchandising, March, 1922

All of the several models of household All of the several models of household movie machines offered by the Keystone Manufacturing Company, 53 Wareham Street, Boston, may be used on any electric current and use any size of electric lamp. Standard movie films, as well as non-inflammable films, are furnished—besides all the theater tickets, bill posters and ushers' arm bands necessary to complete the effect of the home movie performance.

Two other features are the powerful double convex lenses, and the highly polished reflector. The reels have handles on them for winding and are detachable.



Smoker's Outfit with **Electric Lantern**

Electrical Merchandising, March, 1922

Electrical Merchandising, March, 1922

The Joseph Bloch Novelties Company, Inc., of 240-242 East Twentleth Street, New York City, has placed on the market a smoker's outfit with electric lantern. Designed to be both practical and ornamental, it is equipped with a cigarette holder, two cigar rests, a match box holder, ash tray and electric lantern, and may be had in mahogany, gold and polychrome, silver and polychrome, ivory and polychrome, gold and black or any other finish desired.

Rotary Canopy Switch

Electrical Merchandising, March, 1922

Electrical Merchandising, March, 1922

A shallow type of rotary switch with a base only in in depth has been added to the line of push-and-pull canopy switches made by the Cutler-Hammer Manufacturing Company of Milwaukee. The new rotary switch is small, the diameter being less than 1 in, and as its depth is but in, it is suitable for use in shallow wall brackets, canopies or plates. Even where this canopy has but a i-in. recess these switches may be used without cutting away plaster back of the canopy. Operation is by means of the small rotary button, the rating is i amp., 125 volts.



Continued on third and fourth pages following, for your convenience in clipping and filing. Each item will fit a 3 x 5 in. standard filing card.



Gossip of the Trade



What About the 660-Watt Limit? Should Rule Dating from 1893 Be Changed?

The electrical committee of the N. F. P. A., which has charge of the revision of the National Electrical Code, will meet in November of this year to consider reports of standing sub-committees covering changes in the current issue of the code for the 1923 edition. One change which has been urged by an important national body affects the so-called 660-watt rule which limits the current load on the ultimate branch circuit, a rule which has been in effect without essential change since the first edition of the code in 1893.

Investigation of this subject will be carried on jointly by the standing subcommittees on wiring systems and standards and on devices and materials. A. Penn Denton, Seventeenth and Oak Streets, Kansas City, Mo., and A. R. Small, 207 East Ohio Street, Chicago, the respective chairmen of these committees, will be glad to receive comments or suggestions either for or against the proposal from interested individuals, firms or industry organizations. The results will, of course, be watched with interest by the industry which they may so vitally affect.

Glimpses of
Electrical Men at Work,
at Play, and in Convention—
as Caught by
Lens and Pencil

Calendar of Coming Conventions

Southwestern Electrical & Gas Association, San Antonio, Tex. May 3-6.

NATIONAL ELECTRIC LIGHT ASSOCIA-TION, Atlantic City, N. J. May 15-19

ELECTRICAL SUPPLY JOBBERS ASSO-CIATION, Hot Springs, Va. May

Westinghouse Agent-Jobbers' Association, Hot Springs, Va. May 29-31.

NATIONAL ASSOCIATION OF ELEC-TRICAL CONTRACTORS & DEALERS, Cincinnati, Ohio. Week of Oct. 9.

Columbus, Ohio, Forms Electrical League

Electrical interests of Columbus, Ohio, have joined forces in establishing the Electrical League of Columbus, which organization is planned to in-

clude the local contractors and dealers, jobbers and public utilities. Educational programs and luncheons are planned. The initial membership of the League was fifty, but an extensive membership campaign, it is expected, will greatly increase this number. W. A. Wolls of the Columbus Railway, Power & Light Company is president; Lawrence A. Sackett, vice-presdent; and O. A. Robbins, secretary and treasurer.

Massachusetts License Repeal Bill Defeated

At a hearing held at the Boston State House on Feb. 1, a speedy defeat was accomplished of the bill recently introduced in the Massachusetts State Legislature to repeal the law relative to the licensing and supervision of electricians. Backed by the Massachusetts State Association of Electrical Contractors and Dealers, a strong representation of electrical interests was present at the hearing. Owing to the nature of the testimony brought out, the legislative committee before whom the hearing was held suggested the advisability of introducing a bill in the next General Court advocating the strengthening of the present law in respect to its more effective enforcement.

Idaho Electrical Contractors Get Together at Pocatello



When this picture gets passed around, you can figure out for yourself how many dutiful wives are going to protest: "John, I told you to wear your rubbers!" Questions of shoe insulation, however, were outshadowed by the constructive papers and talks on the electrical business presented and enjoyed at the semi-annual convention of the Idaho

Electrical Contractors' Association, held at Pocatello January 27-29. Among the speakers were Harvey Ball, retiring president, Burley, Idaho; Ernest L. Dee, Edison Lamp Works, Salt Lake City; Edward Evans, Westinghouse Lamp Company, Salt Lake City; H. T. Plumb, General Electric Company, Salt Lake City; Frank Venable,

Mountain Electric Company, Butte; C. C. Will, Forbes Supply Company, Portland; Z. S. Gaultney, Idaho Electric Supply Company, Boise. New officers were elected as follows: George Pickup, Idaho Falls, president; B. J. Hetherington, Boise, vice-president; William Bullock, vice-president; J. L. Stevens, secretary-treasurer.

Lehigh Valley Electrical Show

The electrical interests of the Lehigh Valley held an electrical show at Rittersville, Pa., in the Manhattan Auditorium (which covers 33,000 ft. of floor space), Feb. 21 to 25. Following are the officers and chairmen who served for the occasion: R. W. Keck, Allentown, Pa., business manager; A. W. Hill, Bethlehem, secretary and treasurer; E. W. Weaver, Allentown, advertising and publicity manager; A. S. Weibel, Allentown, booths, space and exhibition; E. Odenheimer, Allentown, interior decorating; W. T. Kleppinger, entertainment.

New York Radio Show, March 7-11

At the New York Radio Show to be held in the Pennsylvania Hotel, March 7-11, manufacturers and jobbers will exhibit varieties of sets and individual pieces of apparatus for radio telephony and telegraphy. With loud speakers it is planned to entertain the crowds with all sorts of music, lectures and weather signals drawn from the air.

"Electric Home" Game Helps Sell Electrical Idea

William W. Ayer, 225 Fifth Avenue, New York, reports increasing interest in the "Electric Home" Game which he recently placed on the market. The game, which was described in the November, 1921, issue of ELECTRICAL MERCHANDISING, shows some thirty-two electric appliances and a plan of a home, the object being to make the home electrically complete.

Orders have been received, Mr. Ayer reports, from electric companies in New York City, Chicago, Boston, Hartford, New London, Long Island City, N. Y.; Wheeling, W. Va.; Muncie, Ind.; Marion, Ind.; Newark, Ohio; Washington, D. C.; Atlanta, Ga.; Buffalo, N. Y.; Thompsonville, Conn., and other cities.

Grace Hadley Offers Electrical Advisory Service to Home

A unique service for housekeepers and home-makers—a service designed to assist them in the planning of modern, efficient homes, with special reference to their electrical equipment—is being offered by Miss Grace T. Hadley, formerly with the Society for Electrical Development.

Miss Hadley is calling her new venture the "Home Service Bureau for More and Happier Homes" and has headquarters at 159 West Seventy-seventh Street, New York City. Miss Hadley's previous experience has given her an intimate knowledge not only of the newest developments in the provi-

sion of electrical comforts and laborsavers for the home but also of the needs and desires of the housewife. She believes there is a real field for a service that will guide and advise the uninformed home-maker in the pianning of her kitchen, laundry and, in fact, entire home, with special emphasis laid on the labor saving features of electrical appliances.



Robert Biddle, of Philadelphia, probably (and almost literally) stands head and shoulders above other manufacturers of lighting fixtures in detailed and accurate knowledge of manufacturer's cost-keeping methods in his field. That is only one reason among many why he was elected president of the National Council of Lighting Fixture Manufacturers at their recent convention in Milwaukee. Mr. Biddle is head of the Biddle Gaumer Company.

A "100% Club" for Salesmen

A new club for electric appliance salesmen, called the Apex-Rotarex 100% Salesmanship Club, was instituted on Feb. 15 by the Apex Electrical Distributing Company, Cleveland, and is creating great interest among salesmen in the electrical specialty field.

Club membership is open to any wholesaler or retailer selling the Apex company's appliances. There are no membership dues, but in order to be admitted to the club, a salesman must have attained what is considered a "100 per cent" selling record in one of the Apex company's prize contests. Each member, for example, receives a life insurance policy with the compliments of the Apex company. Each member also receives a gold lapel button to wear, as the insignia of his membership. Numerous other benefits are also being planned.

Probably the chief benefit of the club is that whenever a desirable position is open at any of the Apex company's branches, or with the company's distributers, the ranks of the 100% Club are studied, and the positions are awarded to club members wherever possible.

Electric Truck Men Plan Monthly Meetings in New York

In order to discuss plans for the more intensive merchandising of electric trucks, New York electric vehicle men are holding a series of monthly conferences. At the first meeting held under the auspices of the Automobile Bureau of the New York Edison Company and attended by transportation engineers and dealers in electric vehicles, addresses were made by Charles S. Skinner, Jr., Henry S. Baldwin of the General Electric Company A. Jackson Marshall N. E. L. A., and William H. Onken, Jr., editor of the Electrical World, read an address by James H. McGraw, president McGraw-Hill Company.

In this first conference it was brought out that the electric truck has amply proved its reliability and its economy for city haulage. What is needed, the speakers pointed out, is sound, constructive selling in order to acquaint metropolitan truck users with the merits of the electric truck.

Lawrence Hale is now associated with W. M. Gilbert, electrical contractor, of 1260 East Main Street, East Hartford Conn. Mr. Hale is a graduate of the Carnegie Institute of Technology and in the past has had charge of several large electrical jobs and installations.



When Ben Crosby heard that the National Electric Light Association would hold its next convention at Atlantic City, May 15 to 19, he immediately began to whistle "The Boardwalk Blues"—words by Ben and music by the cash register. Crosby runs the famous Boardwalk Electric Shop at Atlantic City but he does not anticipate any run of business because of the convention being there. "Electrical men are the hardest people in the world to sell electrical stuff to," he asserts—and he ought to know for he sells an average of 35 cents a head to the more than a third of a million people who pass through his Garden Pier exhibit every year.

Hot Plate Heater

Electrical Merchandising, March, 1922

Of many uses is the new hot plate developed by the Acme Electric & Manufacturing Company, 1444 Hamilton Avenue, Cleveland, Ohio.

The heating element is of the standard electric stove design and is mounted in a light cast-iron retainer of dimensions designed to fit any gas stove. This retainer is furnished with legs which can be readily attached for domestic purposes. The complete device can be used as an electric toaster, heater or warmer for hospitals, dispensaries, chemical laboratories, garages, battery stations, restaurants, offices and factories. It consumes 660 watts at 110 volts and may be used on alternating and direct current. The weight is 5 lb.



Thermostatic Heat Regulator

Electrical Merchandising, March, 1922

The Gold Car Heating & Lighting Company, 220 Thirty-sixth Street, Brooklyn, N. Y., is manufacturing a line of thermostats for heat regulation in residences, offices and public buildings. These thermostats are electrically operated, current being derived from the lighting circuit. The device is of the positive type, moving through its entire range instantly and causing a similar motion in the valve or damper from fully open to fully closed. The temperature-sensitive element is a double diaphragm containing a volatile liquid, the front wall transmitting its motion to a lever arm operating a switching mechanism opening or closing the electric circuit. In other words, the thermostat performs the function of an ordinary single pole switch, actuated by temperature changes.

Both the flush type thermostat (with all mechanisms excepting the thermostatic element being concealed in the wall) and the cylinder type (for suspension from the ceiling or other support) may also be had.

Aluminum Hot Plate

Electrical Merchandising, March, 1922

Electrical Merchandising, March, 1922

A hot plate of the open coil unit type with an 11½ x 22½ in. cooking surface and 6 in. high is a new product of the Rutenber Electric Company, Marion, Ind. Frame and legs are made of polished cast aluminum. The resistance wire is laid in a Firite plate one inch thick with deep, wide grooves. Each unit is 8 in. in diameter and consumes 1,200 watts on high heat, 600 watt medium and 300 watt low. No pads or blocks are used to store the heat, but instead a metal pin with § in. air space between it and the porcelain block. There are no screws or bolts on the top surface of the plate. Weight of the hot plate ready for use is 12 lb.





Appliance Cord Sets

Electrical Merchandising, March, 1922

Cord sets are now being made up and offered by the Beaver Machine & Tool Company, Inc., Newark, N. J., consisting of 7 ft. of asbestos covered heater cord, "Benjamin" standard two-piece attachment plug, "Beaver" switch plug and feed-through switch. This switch plug fits all standard makes of appliances and makes contact on either flat or round terminals.

Heater Plug

Electrical Merchandising, March, 1922

Electrical Merchandising, March, 1922

The No. 1150 heater plug with push-through-switch manufactured by Henry Hyman & Company, 476

Broadway, New York City, is modeled like the No. 935 "Best" heater plug with clip-type contact terminals of phospher bronze. They permanently retain their tension, according to the maker, and will fit all types of flat or round posts. The switch mechanism of "quick make and brake" type is solidly riveted and sealed to the exterior

molding, thereby preventing looseness resulting from handling.

The exterior of the No. 1150 plug is made of "heat-proof" asbestos composition with nickel plated coil spring and protected rubber bushing.



Kitchen Unit for Mixing, Grinding, Slicing, Beating and Freezing

Electrical Merchandising, March, 1922



A single motor driven kitchen unit designed, with its various attachments, to take over many of the thresome manual operations connected with the preparation of even the small-family dinner—namely, mixing, beating, grinding, slicing and freezing—has just been developed by the Troy Metal Products Company, Troy, Ohio.

The motor is mounted on an emameled and nickel-finished stand, over the mixbowl. For mixing doughs and batters, and whipping, two kinds of beaters are provided, and the bowl may be raised or lowered when a smaller or larger quantity is being mixed. The switch may be regulated for three speeds—an important provision, for, with the recipe book provided, the housewife can get far more accurate and certain results than she is usually able to obtain. The various ingredients are slid or poured into the bowl through a funnel.

Besides the heaters, the "Kitchen-Air" has a chopper for meats and other foods; a grinder for coffee; a slicer for potatoes, vegetables and fruits; a strainer; and an ice cream freezer. All of them are made ready for work simply by connecting with the hub.

Oscillating Cabinet Washer

Electrical Merchandising, March, 1922

Electrical Merchandising, March, 1922

The Altorfer Brothers' Company of Peoria, Ill., announces the development of a new oscillating-type cabinet washer of six-sheet capacity, equipped with copper tub. In construction the new "A. B. C." oscillator is said to have the same gear assemblies and other moving parts used in other types of A. B. C. washers.

The cabinet is of galvanized Armco iron, gray enameled. All moving parts, while safely enclosed, are yet said to be easy of access. The frame is of heavy angle-iron. The copper tub is heavy, and lined with tin. A copper lid is provided.



What's new on the market? These pages will tell you.

Multiphase Renewable Fuse

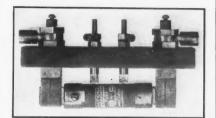
Electrical Merchandising, March, 1922

Electrical Merchandising, March, 1922

The Federal Electric Company of Chicago has developed a low-voltage auxiliary coll which is embodied in the renewable cartridge of "National" renewable fuses. As the cartridge can go into the case in but one position, it easily makes the auxiliary connection with the fuse case itself. Leads are then brought out for connecting the inter-phase circuit in either delta or "Y" connection. The fuses are made with either wire connections attached to the case for front-connecting, or auxiliary knife-blade connections are attached for back-connecting on panels, switchboards, etc.

etc.
These new fuses are constructed so as to withstand the high starting current of motors, yet protect the running load within the limits prescribed by the Un-

derwriters. As the fuse is made for multiphase circuits, it acts as a circuit breaker—that is, when one fuse blows, the auxiliary device makes one of the other elements in one of the other fuses blow, thereby breaking the circuit and eliminating the possibility of the motor running as a single-phase motor.



Oscillating Clothes Washer

Electrical Merchandising, March, 1922

Electrical Merchandising, March, 1922

The cylinder of the new "One Minute" cabinet washer made by the One Minute Manufacturing Company, Newton, Ia., has cast aluminum ends and hardwood slats, oscillates twenty-eight times a minute, and is constructed to force the foaming suds through the clothes. The thirteen apexes not only elliminate the use of the divider boards but provide greater agitation of water, and give full capacity.

The tub is of solid copper, tin planished on the inside and rustproof. The drain is of solid brass, with quick opening plug, easily accessible and provides for hose connection. The drive is by means of a vulcanized cord belt. Cylinder control is by means of a lever. The motor is of standard splashproof type with sufficient size to operate both washer and wringer at same time. There is a snap switch on the side of the tub.

This machine is of the semi-cabinet type. All gears and working parts are entirely inclosed. The tub and lid are of copper, finished and lacquered. The cabinet is aluminum plated.

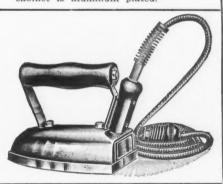
Electric Iron

Electrical Merchandising, March, 1922

Electrical Merchandising, March, 1922
The 6-lb. electric iron made by the Rock Island Manufacturing Company, Rock Island, Ill., may be had with or without the C-H feed-through switch. The heating element is insulated with sheet mica, and a heavy iron cap designed as a reservoir of heat covers the heating element and is bolted through the element to the base. A steel cap highly polished provides an air space to prevent radiation of heat from the interior of the iron.

Both base and hood are nickel plated on copper.



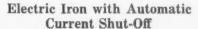


Traveler's Electric Iron

Electrical Merchandising, March, 1922

Electrical Merchandising, March, 1922

Easily carried in a leather, plush-lined case is the small traveler's iron, "Diskus," which may be had from Strauss & Premo, 9 West Twenty-Ninth Street, New York City. It weighs only 2 lb. and by an arrangement of plugs may be adjusted for use on circuits of 110, 150 and 220 volts. It is nickel plated and is torpedo-shaped, with the point especially heavy and especially heated, to facilitate ironing under tucks and folds.



Electrical Merchandising, March, 1922

Designed to eliminate the danger of fire and of burned-out elements is the new "Reverso" electric flatiron, with its automatic current shut-off. When the iron is forgotten while the current is on, it is automatically shut off and stays shut off until the user starts it again. It is manufactured by the Electro Weld Company, 70 Munroe Street, Lynn, Mass.

Drain Cock for Washing **Machines**

Electrical Merchandising, March, 1922

Electrical Merchandising, March, 1922

The "Leak-proof" drain cock made by the Ferd Messmer Manufacturing Company, 2700 South Seventh Street, St. Louis, Mo., is designed for washing machines.

The cleanout feature is to provide for instant removal of buttons, lint or other stoppage; the triple thread permits quick opening or closing of the valve, and the knurled cap provides a "door knob" grip said to make sticking impossible.

The device is also furnished for machines already in use.



Electric Iron

Electrical Merchandising, March, 1922

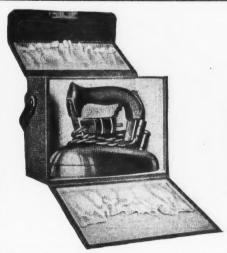
A new electric iron has been placed on the market by the Home Service Electric Works, 604 Chapel Street, New Haven, Conn. The device is used on the standard voltage of 110 volts and consumes a single heat of 525 watts. It weighs approximately 6 lb.

Lighting Fixture Hanger

Electrical Merchandising, March, 1922

A decorated hanger, in either ceiling or suspension type, is the latest product of the F. W. Wakefield Brass Company, Vermilion, Ohio, manufacturers of "Red Spot" products.

These units have a decorative design on the canopies and holders, and also a tassel to give finish to the glassware. "Red Spot" Hangers can be used with any of the urn-shaped glassware.





Continued on third and fourth pages following, for your convenience in clipping and filing. Each item will fit a 3 x 5 in. standard filing card.

Conference on Engineering Training for Business Men, at Pittsburgh in May

The United States Commissioner of Education is calling a second public conference on commercial engineering, on behalf of a committee appointed by him to investigate business training of engineers and engineering training for students of business.

The conference will be held on May 1 and 2 at the Carnegie Institute of Technology in Pittsburgh. President Arthur Hamerschlag of this institution President is a member of the committee which is composed of prominent deans of schools of engineering, and of commerce in our larger universities, and of engineers and business men who are nationally known for their interest in the reduction of the costs of production, distribution, transportation, etc., through better training in schools and colleges of the personnel of industry and commerce.

The conference will be open to the public. Invitations to appoint delegates to the Pittsburgh Conference, however, will be sent by the Commissioner of Education to commercial and trade organizations, engineering and scientific societies, educational institutions and other groups, as well as to prominent individuals.

Owing to the timeliness of the subject, the conference in Pittsburgh will have even greater national significance



When a big job needs a big man we strongly recommend the electrical industry as a source of supply. There's the National City Bank in New York, for example—the largest in the world—and its recently elected president, Charles E. Mitchell, here pictured aboard the S. S. Olympic homeward bound after a business trip abroad. Mr. Mitchell's electrical career began in Chicago with the Western Electric Company, where he got on intimate terms with problems of credit, purchasing, manufacturing and selling. His business address was changed to the Trust Company of America in 1906, and in 1916 he was elected president of the National City Company, an office he continues in addition to his new work.



"Has anybody here seen Kelly, K-E-Double L-Y." Oh, yes; here he is—J. F. Kelly, Sr., manager of the Bureau of Show Room Sales, New York Edison Company, daintily twirling a new cigar, while he gingerly treads the curbing in imitation of his boyhood stunt of making a mile a minute on a narrow steel rail. And lest he should trip, he has for his guardian angel a twin shamrock, the fair Lauretta O'Brien.

than the first public conference on this question, which was held in Washington two and one-half years ago under the direction of this committee on commercial engineering of which Dr. Glen Levin Swiggett of the Bureau of Education is chairman.

"The four major topics of the conference," says Dr. Swiggett, "will be presented and discussed at general and round table sessions by business men, educators and engineers, contributing to the construction of a co-operative program between education and business for the better co-ordination of all productive and distributive processes in trade and commerce. It is planned to have the second conference even more constructive than the first, since which time the curricula of twenty-nine of the 119 engineering colleges reporting to the Bureau of Education have been favorably modified to include one or more of the four committee recommendations. Outstanding topics at the Pittsburgh Conference will deal with the new problems that have recently arisen in modern industries, the solution of which demands a more scientific approach to include job analyses and personnel specifications and a translation of these into a new and teachable content for use in our engineeding and commerce schools; with the training of the engineer for a better understanding of problems relating to

community development; and with the training of the engineer for management of over-seas engineering projects."

Among the members of the committee on commercial engineering are:

Among the members of the committee on commercial engineering are:

A. C. Bedford, chairman of the board of directors, Standard Oil Company, New York, N. Y.

Wallace B. Donham, dean of the Graduate School of Business Administration. Harvard University, Cambridge, Mass. Gen. George W. Goethals, 40 Wall Street. New York, N. Y.

John H. Finley, educational editor, New York Times, New York.

Frederick P. Fish, Fish, Richardson & Neave, Boston, Mass.

Arthur A. Hamerschlag, president Carnegie Institute of Technology, Pittsburgh, Pa.

John Hays Hammond, mining engineer, Washington, D. C.

E. M. Herr, president Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa.

E. H. Hooker, president Hooker Electrochemical Company, New York, N. Y.

Samuel Insull, president Commonwealth Edison Company, Edison Building, Chicago, Ill.

Anson Marston, dean division of engineering, Iowa State College, Ames.

Charles D. Marx, department of civil engineering, Leland Stanford Junior University, Stanford University, Cal.

E. J. Mehren, editor Engineering News-Record. McGraw-Hill Company, Inc., New York, N. Y.

Francis C. Pratt, vice-president General Electric Company Schenectady, N. Y.

Herman Schneider, dean College of Engineering and Commerce, University of Cincinnati, Cincinnati, Ohio.

Charles A. Stone, Stone & Webster, 120 Broadway, New York, N. Y.

Davis R. Dewey, professor of economics, Massachusetts Institute of Technology, Cambridge, Mass.

Massachusetts I Cambridge, Mass

E. C. Headrick Heads Denver Electrical League

Owing to the departure of T. O. Kennedy for Cleveland, where he will assume management of the Ohio Public Service Company, the chairmanship of the Denver Electrical Co-operative League has been given to E. C. Headrick, who has served as vice-chairman of the League since its organization last summer.

In his new position Mr. Headrick will have the central station, jobbers and manufacturers solidly behind him in completing the program outlined for the first year's activity. Until the annual election of the Denver Association of Electrical Contractors and Dealers on Feb. 3, Mr. Headrick was president of that organization.

F. F. McCammon of the Denver Gas & Electric Light Company, was elected vice-chairman of the League advisory committee to succeed Mr. Headrick. O. L. Mackell, chief clerk of the same company, has been appointed by W. J. Barker, the general manager, as the fourth representative of the central station on the advisory committee to fill the vacancy left by Mr. Kennedy. Mr. Hendrick has also been appointed chairman of the building committee having charge of the building of Denver's first electrical home.

The A. J. Alsdorf Corporation of 404 South Wells Street, Chicago, has taken over the entire sales organization of the Stuart Products Corporation, manufacturers of Make-UR-Own batteries.



It's true that we didn't hold a slogan contest to obtain a text for the Home Electric Number. But had we staged such a competition, the man on the right would have walked off with first money. For R. W. Belmont, sales manager of the Beaver Machine & Tool Company, Newark, N. J. is the man who, in painting for us a word picture of electric-wrought blessings in the home, gested an expressive gesture and summed it all up as: "Happiness in Every Room." Following the attachment cord to its plug, you will discover L. A. Baumann of the American Manufacturers' Agency, Chicago.

Radio Association Adopts Traffic Rules

Wireless traffic rules for all amateur radio operators in Syracuse, N. Y., have been approved by the Syracuse Amateur Radio Association, which local electrical equipment dealers sponsored last year. Under the rules the air is to be free for sending from 6 o'clock until midnight. No sending is to be done between 9.45 and 10.05, the time the government stations are sending.

Sam Woodworth, a well-known amateur radio expert, advocated a radical change in wireless transmission. He said that the association should seek to eliminate all spark-coil sending sets, and make Syracuse entirely a "Continuous Wave" city. The association was recently permanently organized and meets twice each month in rooms provided by the Hughes Electrical Corporation.

Robert E. Rae, formerly general manager of the Northwestern Equipment Company, New York City, has just been appointed district manager for the Connecticut Electric Manufacturing Company of Bridgeport, Conn., manufacturer of electrical supplies, with offices at 33 West Forty-second Street, New York City. Mr. Rae's territory covers Greater New York, the State of New Jersey and Philadelphia.

New York Jobbers Elect Officers at Annual Meeting

At the annual meeting of the Electrical Jobbers Club of New York, on Feb. 7, 1922, the following officers were elected for the ensuing year: President, G. L. Patterson; vice-president, W. H. Vogel; and treasurer, W. J. Kreger. The executive committee comprises the following: W. J. Kranzer, H. T. Hochhausen, H. Q. Foreman, L. D. Baily, G. V. Weir, and M. Zucker. W. J. Kreger was reappointed secretary, with office at 47 West Thirty-fourth Street, New York City.

The National Light and Electric Company, 289-292 Market Street, Newark, N. J., reports the busy operation of its new place of business, occupied by the firm on Oct. 15. The organization is distributing electric appliances of all sorts, "wholesale only," and is also acting as importers' and exporters' agent. George Ollendorf, Harry Hirsch and Albert R. Hammerslag were the organizers of the firm, with Mr. Hammerslag as sales manager.

George Borgfeldt & Company have opened an attractive gift shop in their establishment at Sixteenth Street and Irving Place, New York City. This gift shop contains a large collection of unusual merchandise, carefully selected from the firm's imports. The head of this department, Miss Brown, is an experienced gift-shop manager, having formerly been a retail buyer. Visitors to the shop will gladly be aided with suggestions as to how to plan and equip gift shops.

The Acme Lighting Fixture Company has purchased for its own occupancy the seven-story loft building at 107-109 West Thirteenth Street, New York City, formerly occupied by the Dale Fixture Company. This building will be improved in the latest design, and special attention is to be given to arrangements to insure the greatest economy and production. Increased facilities will enable the company to create a distinct department for its retail trade, rounding out its line and enabling it to cover the entire field. A 104-page revised catalog illustrating the Acme line has just been issued by the company and will be mailed on request.

The Scientific Heater Company, Cleveland, Ohio, manufacturer of the new Dryolette electric model clothes dryer, announces that Crosby & Elkins, Atlantic City, N. J., will maintain a display and conduct a demonstration of this modern electric appliance during the coming year at their Garden Pier display rooms.

Mailhouse & Golding, Inc., electrical engineers and contractors, have recently been incorporated at 185 Church Street, New Haven, Conn. Robert J. Mailhouse is president and treasurer and Joseph N. Golding is vice-president and secretary.

The Superior Machine Company of DeKalb, Ill., owner of the Cooling swinging-wringer patents and manufacturer of the Superior oscillating-type washing machine and a full line of dolly-type machines, has been purchased by the Hurley Machine Company of Chicago. The Superior Company will continue to manufacture and merchandise its products as formerly.



Back in 1893 when Henry A. Morss graduated from the Massachusetts Institute of Technology, we doubt if he looked forward to an executive career that would make him a fivefold treasurer. Yet today he holds that important office in the two Simplex Wire & Cable Companies (the second being

that of California), the Simplex Electric Heating Company, the Morss & Whyte Company and the Old South Society in Boston. They are all important jobs. We think the other six people in the picture will agree with us, however, that his finest job is being head of an ideal American family.

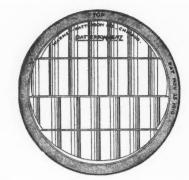
Ignition Gage

Electrical Merchandising, March, 1922

Faulty spark plugs, leaking high-tension wires and short circuits can be tested and detected with the new "Airco" ignition gage offered by the Edward A. Cassidy Company, Inc.. 25 West Forty-third Street, New York City.

West Forty-third Street, Aren 2000. City.

This gage is a hard-rubber insulating shell into which is packed a glass tube of "Neon," the gas that becomes luminous when brought into contact with a spark plug or high-tension electric current. The contact is made by a metal cap which seals one end of the tube.



Lens for Electric Headlight

Electrical Merchandising, March, 1922

Electrical Merchandising, March, 1922

Designed for the effective control of deflected light, a new lens for motor car electric headlights is being manufactured by the Warner-Patterson Company, 914 South Michigan Avenue, Chicago, Ill. The lens, its manufacturer explains, projects a flood of evenly distributed light below a line 42 in. from the ground, the illumination extending 500 ft. ahead of the lamp. Special effort has been made to eliminate "bright-spot" focussing, and patchy light patterns. In order to offset turning by vibration, the lens is made heavier at the bottom than at the top. The lenses are available in diameters ranging from 7½ to 12 in.



Electric Rear Signals for Motor Cars

Electrical Merchandising, March, 1922

Connected through the brake-rod of a motor car, the "Slo-Lite" rear signal of the Culver-Stearns Manufacturing Company, Worcester, Mass., flashes whenever the brake pedal is depressed. Each signal is packed in an individual carton, together with switch, bolts, screws, nuts, clamp, wire and instruction sheet. The lamp measures 4½ in. in diameter and is finished in black enamel with nickeled bezel. A silver reflector is used, and a 21 cp. nitrogen bulb is regularly supplied.

Ignition Tester

Electrical Merchandising, March, 1922

The new "Spark-C" ignition tester brought out by the Westinghouse Lamp Company, 165 Broadway. New York City, by a mere touch of the point to magneto or coil, wire or plug, tells whether a spark plug is dead or alive; whether its spark gap is normal, too wide or too close; whether it is clean or dirty, etc. It tests every system of high-tension ignition, whether the current source be dry cells, storage battery or magneto.

The device is a hard-rubber pencil inclosing a small glass tube filled with "Neon." "Neon" is a gas obtained from the atmosphere having the property of glowing or lighting when brought in contact with a wire carrying intermittent surges of high-tension current. The character of the glow indicates the condition of the plug.

Automatic Projector Lamp

Electrical Merchandising, March, 1922

An automatic projector lamp of special flaming are type made by the Sperry Gyroscope Company, Manhattan Bridge Plaza, Brooklyn, N. Y., has been placed on the market by the Sun-Light Arc Corportion, 1600 Broadway, New York City. The part of the flame of the arc which is ordinarily distributed is concentrated in this arc in a small globule within the positive crater. A focusing device automatically maintains the proper distance between the crater and the condenser bus within \$^1/64\$ in.

This focusing device is a fundamentally new method of controlling electrode feeding. It is called the positive control, i.e., it controls the positive control, i.e., it controls the position of the positive crater irrespective of carbon, current, or voltage variations.

The current range available with this lamp is from 60 amp, to 120 amp. The resulting illumination on the screen is said to be slightly more than 100 per cent increase over the illumination obtainable at the same current with ordinary projector lamps. This lamp is the first projector arc lamp which may be said to be truly automatic in continuously holding the arc at the proper focus as well as maintaining proper arc length.



Electric Heat Indicator for Motor Cars

Electrical Merchandising, March, 1922

Operating electrically from a thermostat, the new "Warn-O-Meter" manufactured by the Stewart-Warner Speedometer Corporation, Chicago, Ill., shows motorists their engine temperature.

The indicator may be mounted on the radiator cap, on the fender, or any other convenient location, since its operation has nothing to do with the cooling water in the radiator. When the motor is cold no indication is visible. When a normal operating temperature is reached a green light appears in the vertical slot, and a red light flashes on when the motor begins to overheat. The indicator is finished in black enamel and nickel, with a heavy glass cover.

Automobile Gasoline Vaporizer

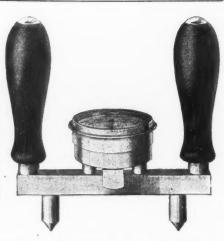
Electrical Merchandising, March, 1922

A device for vaporizing the gasoline in the carburetor, in order to start the motor instantly even in cold weather, is the electric vaporizer made by the Primo Electric Company, 136 Federal Street, Boston, Mass. The device is designed to fit any make of automobile, and is installed simply by unscrewing the petcock or plug in the bottom of the carburetor and attaching the vaporizer in its place, wired to the battery and switch.

Tester for Electric Starter and Battery

Electrical Merchandising, March, 1922

"Startometer" is the name given the tester for electric starters and starting batteries being marketed by the H. B. Shontz Company, 161 West Sixty-fourth Street, New York. With this device the total ampere strength of each cell of a storage battery may be tested, and its use simplifies the location of defective cells. In testing the amperage drawn by the starting motor, the "startometer" is simply held against the cable through which the current flows. One of the advantages of making a current test of a starting motor in actual operation, the manufacturer points out, is that excessive frictional load is measured, thus calling attention to tight bearings, dragging clutches, etc.



Small Motor Starter

Electrical Merchandising, March, 1922

A new type of motor starter, known as "Type WK-30," designed to provide complete protection to both the operator and the motor, has been developed by the Westinghouse Electric & Manufacturing Company for starting small alternating-current motors by connecting them directly to the line.

This starter consists essentially of an inclosed quick - make - and - break knife switch, which is operated by an exterior handle. It protects the motor from overloads both when starting and when running, because it is equipped with thermal cut-outs which open the circuit on dangerous sustained overloads but do not operate under harmless momentary overloads. The cut-outs resemble cartridge fuses but are not interchangeable with fuses so that the latter cannot be substituted for them. They operated by fusing a special washer, which can be replaced in a few seconds time at negligible cost. All parts are inclosed so that the operator cannot touch live contacts.

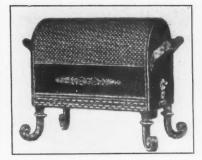
These starters are made in sizes for alternating current and the protection of the starters are made in sizes for alternating current and the protection of the starters are made in sizes for alternating current and the protection of the starters are made in sizes for alternating current and the protection of the starters are made in sizes for alternating current and the protection of the starters are made in sizes for alternating current and the protection of the protection

These starters are made in sizes for alternating-current motors up to 3 hp., 110 volts; 10 hp., 250 volts; and 10 hp., 600 volts.

Electric Water Heater

Electrical Merchandising, March, 1922

The new electric faucet heater offered by the S. U. E. Company, Room 204, 89 Beach Street, Boston, Mass., is an aluminum barrel which screws into a faucet with a hose bib. It has a 600-watt heating unit controlled by the faucet. The barrel is filled with a cupful of water which is heated after a turn of the faucet. It is designed particularly for barber shops and other places where such an amount of water is wanted at a time.



Ornamental Table Electric Heater

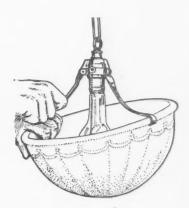
Electrical Merchandising, March, 1922

A new European contribution to the development of household electric heaters is a small decorative heater made by Clemancen, 23 Rue Lamartine, Paris, France. This is Model A, No. 1, and it is designed to be a decorative as well as useful addition to the library or work table, where it can throw its heat directly on the worker. It may be used on alternating or direct current, 110 to 220 volts, and is rated at 550 watts. Other models may be had in various decorative styles, to be placed on the floor or in fireplaces.

Light Adapter

Electrical Merchandising, March, 1922

The "Commercial Unit light adapter" developed by the L. & W. Brass Works, 3006 Trving Park Boulevard, Chicago, is to facilitate the fixing of a shade on a hanging electric light bulb. It is a small fixture that fits over any bulb socket—key, keyless or chain socket—and will hold any shade from 6 in. in diameter up. The entire device, including the tongues that snap over the edge of the bowl. is made of spring brass.



Canopy Pull Switch

Electrical Merchandising, March, 1922

The Bryant Electric Company of Bridgeport, Conn., has brought out a new pull switch for use inside the canopy of ceiling or wall fixtures. The switch mechanism is mounted in a substantial molded insulation block, with provision for attachment. Four different types of attachment brackets are provided, so that the switch can be best mounted on the fixture supporting tube, depending upon the space available. A separable "bell-mouth" which can be readily fastened to the canopy affords a guide for the passage of chain from switch without marring the appearance of the fixture.

This canopy switch has a rating of 660 watts, and is therefore particularly suited for high-power gas-filled or nitrogen-type lamps.



Luminous Pendants

Electrical Merchandising, March, 1922

The new "Radium-Lite" luminous pendants placed on the market by the Eagle Manufacturing Company, 430 Kent Avenue, Brooklyn, N. Y., may easily be attached to a pull chain or hung on a bedpost, telephone, or door knob. Glowing in the dark they are guide posts to the late homecomer or to any one fumbling around in the house without lights.

Electric Grinder

Electrical Merchandising, March, 1922

Electrical Merchandising, March, 1922

The Louisville Electric Manufacturing Company, Inc., Louisville, Ky., has placed on the market an electric grinder of 2-hp. capacity which runs on either alternating or direct current. Improved ventilation is obtained by means of an air intake so located that clean air is drawn through the motor; the grinder can be operated continuously without exceeding the temperature limits and, for intermittent duty, the motor will operate safely with the air intake opening closed; the machine is provided with ball bearings with housings so constructed that bearings will be kept free from dirt; the safety hoods are made of steel with hinged side wall so that the wheels can be quickly changed; rest are adjustable and attached through an improved method.

The floor space required for this grinder is 28 in. x 19 in., for the alternating-current type; and 34 in. x 19 in. for the direct-current type. The height to the center of the spindle is 38 in. The no-load speed on direct-current or 60-cycle alternating-current circuits is 1,800 r.p.m. The weight is 400 lb.

A Typewriter that Writes By Wire

Electrical Merchandising, March, 1922

Electrical Merchandising, March, 1922

A typewriter combined with a telegraph, that is designed to eliminate many of the errors and delays that crop up in business, has been developed by the Morkrum Company, 1410 Wrightwood Avenue, Chicago. Operated like a typewriter, it prints its message on a piece of tape simultaneously on any number of machines at any distance. It can be used with, or as a substitute for, telephone, tubes and messengers, to speed up the handling of detail and reduce errors.

The "Teletype" prints its message legibly on every machine; it can be operated in noisy places where a telephone is at a disadvantage; it requires no one on the receiving end as the telephone does and prints at the rate of forty words a minute.

File these items on 3 x 5 in. cards every month, to keep your stock index up to date

New Retail Electrical Stores

CALIFORNIA

Long Beach—Home Electrical Specialty Company, 240 East Broadway, C. J. White, Ocean and Parker Avenues. Monrovia (Los Angeles County)—Mrs. Norman Collins and W. H. Orr, 408 Con-

cord Street.

Oakland-Thomas Day Company, 1722 Broadway.

Ventura—Phillips Electrical Company, erected new building on Main Street.

CONNECTICUT

Waterbury — Waterbury Electric Company, Solomon Leon, proprietor, 187 North Main Street, successor to Baruch & Leon.

FLORIDA

Cocoanut Grove (Dade County)—Norwood & Pierce, in garage business, added line of electrical supplies.

Lakeland (Polk County)—H. O. Kight, 207 North Kentucky Avenue.

Pensacola—Chain Battery System, electrical automotive accessories.

Winter Park (Orange County)—Newell Electric Company, new branch in Wellman Block on Park Street.

TDAHO

Burley (Cassia County)—Burley Electric Company.

ILLINOIS

Danville (Vermilion County)—Burress & Miller, formerly in business at Covington, Ind.

Harrisburg (Saline County)—Fred Baker Motor Company.

INDIANA

Columbus (Bartholomew County) —
Thomas Steinbarger, 614 Cottage Avenue.
South Bend—C. A. Severs, successor to
E. L. Burch.
Electric Appliance & Service Company,
Joseph M. Cooper and others, incorporators.
Union City (Randolph County)—Harry
Platt and James Ruby.

Bellevue (Jackson County)—Appel Hig-ley Electric Company, branch store in the Lintgen Building.

Burlington (Des Moines County)—Paul F. Jones, new quarters at 115 North Third

Des Moines—Artistic Electric Fixture Company, 921 Locust Street, successor to Perkins Electric Company.

Kansas City—Noel Electric Company, A. H. Jeans, Manager, 1706 Central Street.

KENTUCKY

Corbin (Whitley County)—John Herzig and Fred Watkins, erected new building on Main Street. Lexington—Chain Electric Battery Sys-tem, electrical appliances and batteries.

LOUISIANA

New Orleans—J. M. Maloney, moved to 807 Poydras Street. W. J. and C. G. Justice, 307 Magazine Street.

MAINE

Lewiston (Androscoggin County)—Hellen & Kirk, 46 Park Street.

MARYLAND

Brunswick (Frederick County)—Harper's Ferry Electric Light Company, High Street between Second and Third Streets.

Lonaconing (Allegany County)—C. S. Buckalew & Company, Ternene Building.

MASSACHUSETTS

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Boston—Karlin & Schlosberg, moved to larger quarters at Portland, Merrimac and Traverre Streets.

Louis Arvedon, moved to larger quarters at 71-73 Portland Street.

Standard Sales Company, incorporators Allan H. Bohlin, 18 Erickson Street, Worcester, Mass., and others.

Arrow Products Company, E. H. Lewis, president; J. Ginsburg, vice-president; G. Mariamson, treasurer.

Fitchburg—Dominic E. Romano, Mater Street, successor to Romano Whitten.

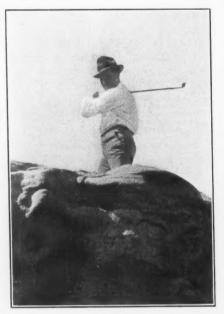
Framingham—James J. Kelly, new shop at 84 Hollis Street.

MICHIGAN

Cheboygan — Hub Electrical Company, Joseph E. Schley and Alex Lynch, pro-prietors, 514 North Main Street. Detroit—Mitchell & Morrison, 15312

Grand River Avenue.
Noland Electric Fixture Company, 2011

Gratiot Avenue.
R. C. Witmiller Electric Company, 1938
Sycamore Street.



Emory Wishon, general manager of the San Joaquin Light & Power Corporation, founder of the well known "self-interest idea" in the selling of hydro-electric securities and leader in the co-operative campaign movement in the West, tries to drive a mountain into the Pacific Ocean, but he couldn't keep serious long enough, as the smile on his face bears witness.

Kalamazoo—Electric Service Company, oved to 316 South Washington Avenue.

MINNESOTA

Forest Lake (Washington County)—Otis M. Richter.

Fosston (Polk County)-Halvor Halvorson.

Minneapolis—Apex Electric Company, 1034 Nicollet Avenue, moved to larger quarters.

NEBRASKA

College View (Lancaster County) — Chapin Electrical Service, H. A. Chapin, Jr., manager. In market for lighting flx-tures, appliances and supplies. Would like to receive catalogs and information on various lines.

NEW JERSEY

Paterson (Passaic County)—Fabrikank & Spivak, 9 Bridge Street.

Red Bank—Francis P. Reid, Stout Building, purchased new building.

Roseville (Essex County)—Cross Electric Store, 549 Orange Street.

NEW YORK

Brooklyn—Crane Electric Company, Inc., 388 Bridge Street.

Strand Hardware Company, Fulton Building, Fulton Street.

Catskill (Greene County)—Clifford A. Story, 20 New Street.

Fredonia (Chautauqua County)—Dwight Webster, 44 East Main Street. Hudson Falls (Warren County)—Em-mons-Greene Electrical Corporation.

mons-Greene Electrical Corporation.

Liberty (Sullivan County) — Kandel Brothers, 110 South Main Street.

New York City—Ajax Electric Company, 847 Westchester Avenue, Bronx.
DeLitte Electric Company, 899 East 163d Street, Bronx.

Louis Katz, Eighth Avenue and 119th Street. Also in business at 32 West Nineteenth Street.
Octagon Electric Company, 217 West Fourteenth Street.
Galwin Electrical Supply Company, recently incorporated, in business at 166 East 106th Street.

North Tonowanda — Miller Electric

North Tonowanda — Miller Electric Equipment Company, 69 Webster Street.
Oneonta (Otsego County)—B. B. St. John will move to larger quarters in spring. Warwick (Orange County)—Benedict & O'Malley, 62 Main Street.

Belle Center (Logan County)—City & Farm Light Company.

Cincinnati—Co-operative Electric Company, 24 South Main Street. Old concern, recently incorporated.

Cleveland—Reliable Electric Company, moved to 3748 West Twenty-fifth Street.

moved to 3748 West Twenty-fifth Street.
Columbus—Ohio Electric Appliance Company moved to 51 West Broad Street.
Lynn-Harvey Electric Company has purchased interests in the company, held by Oscar Avery and A. E. Loeb.
Findlay (Hancock County)—Ohio Electric Company, 313 North Main Street.
Kent (Portage County)—Kent Electric Company, moved to Boettler Room.
Paulding—R. C. Hannengraft, successor

Paulding—R. C. Hannenoratt, successor B. Riopelle.

Sunbury (Delaware County)—Big Walnut Electric Company. Rudolph Burrer and others, incorporators.

OKLAHOMA

Okmulgee—L & H Electric Supply Com-any. C. N. Houston and others, incorpany. C porators.

PENNSYLVANIA

Ambler (Montgomery County)—New building being erected on Butler Avenue.

Edinboro (Erie County)—P. Hostettler, Erie Street.

Grove City (Mercer County)—Harrison Munnel, Firm Garage Building, Center

New Castle—Pattison Electrical Appance Company, moved to 30 East Street.

Philadelphia — Colonial Electric Company, Tenth and Arch Streets. Martin T. Nice, incorporator, and others.

Pottsville—Shegts and Daddow, 2nd and Norwegian Streets, doubled store space. Sharon—Sahli & Harris, 61 River Street.

RHODE ISLAND

Pawtucket—Mullen Brothers temporary quarters at 17 Harrison Street. Formerly in business at 294 Main Street.

Bellbuckle (Bedford County)-Bellbuckle Light & Power Company, in market for new electrical supplies of all kinds. Springfield (Robertson County)-Vernon

TEXAS

Denison (Grayson County)—Koeppen & Baldwin.

WEST VIRGINIA

Elkins—Electric Service Shop, 114 Third Street, bought out Home Power & Light Company's appliance and fixture business.

Wheeling—Davis-Carle Electrical Company, 40 Eleventh Street.

WISCONSIN

Fond du Lac—C. F. Sperbeck and Arthur Lucia, 124 West Scott Street. Hilbert—Louis Siegrist.

Milwaukee—Hugro Appliance Company.
Wallace S. Whitcomb, Charles L. Smithborg and Don E. Stewart, incorporators.
Wisconsin Rapids (Wood County)—
Sherman Auto Sales Company, Earl Sherman, proprietor, successor to Sherman Herrick & man, pro







The Lighter Sighed



A Good Idea Gets Thrust Upon Us

In the last few days several things have come into the office and brought grins with them, individually. Collectively they've stirred up an idea. First, just as the echoes of Milwaukee were retreating to whatever retreat echoes retreat to when they're through echoing, this communication came to our desk. Read it for yourself:

Shh! Don't Let Our Competitors See It

Referring to Milwaukee, I
Have only this to say:
They ought to hold another show
And in that show display
The fixtures that reposed beneath
The counters, out of sight
And only met the favored gaze
Of buyers, late at night.

_JIMMY

Look This Echo Over:

They oughta put buttons, or badges or signs on all the salesmen to keep 'em from selling each other at a show. When an Eastern salesman met a Western salesman both of 'em talked so loud neither of 'em found out for an hour that the other bird wasn't a customer.

-LESS GO

And Here's Another Milwaukee Echo:

A lot of birds at the show talked about "ideas you oughta take home with you from Milwaukee." Well, here's mine: There ought to be a law against laying out any show in circles and cross-sections. It took three manufacturers a whole afternoon to find their own booths.

-SQUARES

And Then This Came In:

How would you like me to write you a piece about the breeding and training of the fish-mouse?

—FARRINGTON FUSEBOX, E. E.

No, we didn't know what a fishmouse was, either. We learned, however, that he is a little rodent with a ring in his tail. He has a mean diameter—a very mean diameter—that just lets him into a 3-inch conduit. You tie a string through the ring in his tail, shoo him into the conduit, and the fish-mouse runs through the pipe, carrying the string with him. Then you tie your wires to the string and

pull them through. We don't know whether Professor Fusebox fancies fish-mice in a fish hatchery....or a cheese box. But the subject seems to have possibilities. Well—

Here's What We're Getting At—

Sparks and flashes of humor keep coming in to us from the boys in the Lighting Fixture game. Its a shame not to pass the good ones around. So if enough good stuff comes in between now and March Tenth we're liable to make this a regular feature.

And Yet Another:

Speaking of that slogan contest they had out at Milwaukee, I can't figure out why I missed out on the money. Here are my entries:

"What's an Amp Without a Lamp?"
and
"Light up Completer and Tease your
Meter"
—SLOGAN SAMUEL

How to Make this Page a Fixture

If you like the idea of a page like this and want to make it a fixture of the Fixture Section, here's how:

Send in your best smiles—in verse, or prose. We'll have to ask you to put your name somewhere on the sheet, just as a matter of good faith. Before we can print anything, we must know where it comes from. But your name need not appear on the contribution unless you want it to.

We ought to add, too, that a page has pretty definite space limitations. And we won't be able to use all the good stuff that comes in. Then too, we'll have to make our selections on closing date—March Tenth for the next issue.

To be good material for this page, as we see it, contributions ought to be directly related to the electric lighting field. And they ought to have good possibilities as smile provocatives.

Address, The Editor,

THE LIGHTER SIGHED,

Electrical Merchandising,

Tenth Ave., at Thirty-sixth St.,

New York.

Sometimes—we've known of a case—a man can make himself smile at a bit of writing intended to invoke a grin from someone else. When the industry develops irregularities, and absolutely wrong practices that put you in a mood that demands a grin to save violence, try writing it to make somebody else smile. And when you've done that, mail it to us.

The Danger of Dignified Demeanor

We knew a man once who thought that a serious expression was as much a part of a business man's sartorial outfit as a necktie. He smiled so seldom that when he went to the dentist's they had to use a pinch bar to get his mouth all the way open.

Little things happened to his trade that worried him a lot. First thing you know, he had nerves; and began supporting specialists. And after a while he saved up enough money so he could afford a nice nervous breakdown.

But it would have been a lot cheaper for him to pull off a healthy snicker at the things that were All Wrong. So, gentlemen, to the improvement of the Lighting Fixture Industry via laughlights, to the widening of smiles and the conservation of nerves, we dedicate this page. Here's looking at you!

Dedication, or Prologue, or Something

One time a great writer
Snapped on his frosted Mazdas
And remarked: "The Light of Life is
Laughter!"

All we can say about his identity If he had one

Is that he was a keen and discerning gentleman. So are Frank Tinney and Don Marquis;

Frank Tinney and Don Marquis; Al Jolson, Roy Moulton and Hi Phillips, And Irv Cobb, F. F. V. and Ring Lardner, who are

All busy putting Laughlights into Life.

Well, here's the first page
Of our Lighting Fixture Section.
Can anybody think of a more approprivate place

To light up a little life with laughter?
All right! Beginning next month
If the stuff is good enough
"THE LICHTER SIGHER" will be an

"THE LIGHTER SIGHED" will be an open page

For every Lighter in the industry Who has a Hunch for a Good Grin, Write it in boys; prose or verse.

-C. L. F.

HOUSE BEAUTH

Country I

National Builder

Town & Country

these Publications are doing Real Selling for Lightolier Dealers

HE new Lightolier National Policy of Dealer Cooperation is working now.

The opening gun is a forceful full page advertisement in each of the publications shown here. It features eight popular Lightoliers.

A simple but effective tie-in is provided which will enable dealers to get the full benefit of this advertising in their localities.

This tie-in is an attractive window display card and is free to dealers.

Yours is now ready. Write us today and let us tell you how these publications will work to build sales for you all through 1922.

Lightolier 569 Broadway at Prince St.

LIGHTING FIXTURE and LAMP HEADQUARTERS